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NUMERICAL STUDIES ON THE VERIFICATION  
OF A PRIMARY TETONIC AND SEISMIC  
MOTIVATING FORCE

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California University

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Uniformity. Results for first and second order non-uniformities indicate that this force produces stress fields of sufficient magnitude and configuration along prominent geological features such as the San Andreas Fault, Techeng-Lukian Fault in China, Aleutian Trench and Volcanic Arc, and the Mid-Atlantic Ridge to activate and sustain the tectonic and seismic activity of these regions. In regions along the coast of Iceland, Norway, Britain, and Portugal where actual stress measurements have been made, the calculated stress fields are in essential agreement with the measurements.

*ii a*

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NUMERICAL STUDIES  
ON  
THE VERIFICATION OF A  
PRIMARY TECTONIC AND SEISMIC MOTIVATING FORCE

by

Paul Lieber and Kwan-Sun Wen

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ERRATA

- Page 13 - first line after "seismic process," a superscript (1) should be added as a reference.
- Page 14 - line 16 "....not predicted on the model which...." should read "....not predicated on the model by which..."
- Page 15 - line 19 "evolutionary context of ..." should read "evolutionary content of ....."
- Page 21 - line 3, "....progressively adopts to...." should read "....progressively adapts to ....."
- Page 22 - line 4, "mechanical non-conformities of third...." should read "mechanical non-uniformities of third...."
- line 6, "indentify, a....." should read "identify, a ....."
- line 21, ".....historical development of the ...." should read "....historical development of the...."
- Page 27 - line 5, "dicular to the sperical layers..." should read "dicular to the spherical layers....."
- Page 29 - line 15, "....such regions, if not for producing....." should read ".....such regions, and for producing....."
- Page 38 - line 6, "....for the developments of...." should read "....for the development of ....."
- Page 41 - bottom line after the last word of the sentence "seismicity." a superscript (1) should be added as a reference.
- Page 43 - line 7, after the word "Earth" a superscript (1, 18, 19) should be added as references.
- Page 49 - '29. J. Tuzo Wilson, "moa's Almanac...." should read '29. J. Tuzo Wilson, "Mao's Almanac...."

## INTRODUCTION

The results presented in Part III of this final technical report are based on the conception of a Primary Tectonic and Seismic Motivating Force (PTSMF) and a procedure to test its verification by numerical calculation, both of which were conceived and developed prior to the initiation of the present contract. Consequently, this report pertains primarily to the numerical implementation of this procedure, with the principal objective of numerically verifying the PTSMF by calculating the stress and deformation fields which it produces in a hierarchy of mechanical models of the actual earth portraying its mechanical non-uniformities with increasing specificity. However, to give proper perspective to this task, we present in Part I the historical development of the work which led to the conception of the PTSMF and in Part II an outline of the theoretical considerations which help to show that the PTSMF was discovered in a conceptual framework which, in fact, rests on the bedrock of physical theory, and which may serve to demonstrate the primacy of force in relation to the principles of classical mechanics and physical theory as a whole.

Although the numerical results presented here substantially verify this force as the principal motivator of tectonic and seismic phenomena in the earth, its scientific and practical ramifications remain to be fully explored in detail, which, unfortunately, we have been unable to do under the present contract due to insufficient funding. When the above task is completed in subsequent investigations, we then plan to present in detail the conceptual, theoretical and analytical background of PTSMF that were developed prior to the initiation of the present contract, and which led to the numerical analysis and calculations conducted with its support.

## I. HISTORICAL BACKGROUND AND DEVELOPMENT

For the purpose of rendering a reasonably self-contained final technical report and a coherent presentation of the unfolding of ideas that led to the numerical results presented, we shall recapitulate and reference some earlier ideas and their historical development, as partially reported in publications and lectures, in this part of the report.

### A. A Phenomenological Mechanical Description of the Seismic Process and the Conception of a Phenomenological Mechanical Model of the Earth

The point of origin which led originally to the recognition that relaxation phenomena in the earth are an essential and, in some cases, a dominant aspect of important geomechanical processes, was the search for conceivable and physically admissible processes which may account for the production and recurrence of earthquakes in seismically active regions, where extra terrestrial agents and catastrophic forces suddenly produced in the earth are excluded as casual agents. All cases considered, namely shallow, intermediate and deep focus earthquakes, led necessarily to the conclusion that relaxation phenomena in the materials of the earth are essential to account for these various kinds of earthquakes. These considerations, in turn, led to the very significant and apparently new conclusion, that the inelasticity of the earth is a fundamental aspect of its seismicity, an aspect which in fact was previously de-emphasized and therefore overlooked in seismological models and in their mathematical applications to theoretical seismology.

The important inference cited above concerning the fundamental role of relaxation phenomena in the mechanical evolution of earthquakes and by which it was

concluded that the inelasticity of the earth is an essential feature of its seismicity, was originally inferred from a phenomenological description of the seismic process which evidently incorporates indisputable phenomenological features of this process.<sup>(1)</sup> By seismic process or seismic mechanism we mean here a mechanism which (1) progressively accumulates strain energy in the crust, (2) redistribution of the accumulated strain energy in the crust by relaxation processes, (3) the consequent localization and elevation of stresses at the unrelaxed regions within the crust, (4) the dynamical release of these localized and elevated stresses when the crustal material fails to support them in static equilibrium which phenomenologically defines the onset of an earthquake, and dynamically loads the sub-crustal material, (5) recovery of static equilibrium, phenomenologically defined by the termination of the earthquake, including aftershocks that follow, and the re-emergence of quiescent state, (6) relaxation of stresses in the sub-crustal layer with consequent reaccumulation, redistribution, localization and elevation of stresses in the crust, and (7) the recurrence of earthquakes at the sites of elevated stresses, produced at newly localized regions in materials which can no longer support them in static equilibrium. This essentially completes the phenomenological description of the seismic process noted above which portrays the cyclicity of seismic phenomena in seismically active regions and in which certain critical levels of ambient stresses are produced and maintained by an appropriate seismic driving force.

If, in addition, we postulate that the driving force depends strictly on location and is essentially time independent, then for reasons given above, the phenomenological description of the seismic process leads to certain definitive

conclusions concerning the mechanical phenomenological features of the earth which follow logically from the phenomenological description of the seismic process presented and to which we must therefore assign the same credibility as we do the phenomenological facts on which the description is based. With this condition on the driving force, it follows directly from the above phenomenological description of the seismic process that the earth must necessarily be (1) non-uniform in mechanical constitution, (2) inelastic, and (3) at least partially Maxwellian inelastic. It is noted that these basic inferences drawn logically from the phenomenological description are essentially phenomenological in character, as they should be, since they were inferred from a phenomenological description. In particular, the class of Maxwellian materials of the earth referred to in item (3) are phenomenological, rather than constitutively defined by the description of their behavior under phenomenologically prescribed mechanical conditions. Accordingly, the class of Maxwellian materials so defined, which includes as its simplest member the Maxwell body, in fact includes materials which constitutively have complicated time rate dependent and non-linear properties. Moreover, it is important to emphasize here that because these essential phenomenologically mechanical features of the earth, which define a phenomenological mechanical model of the crust and mantle, are logically implied by phenomenological features of the seismic process which appear indisputable, it is consequently expected that all subsequent findings in Geomechanics should necessarily conform with this basic phenomenological mechanical model of the crust and the mantle. This expectation has, in fact, been consistently substantiated by subsequent developments in Geomechanics up to the present time.

B. Ramifications and Specific Consequences of the Phenomenological Mechanical Model

From our phenomenological description of the seismic process and the phenomenological mechanical model of the crust and mantle based upon it, there originated a comprehensive study in geomechanics which has been sustained since their inception in 1950.

(2)

Our first attempt in 1952 was to explore analytically, in terms of comparatively simple mathematical constitutive models, the implications of incorporating Maxwellian visco-elastic properties in seismological models of the earth in order to assess their consequences on seismic wave propagation and observational seismology. These early investigations included the analytical study of the propagation of Love waves in elastic crustal layers supported by a half space consisting of a Maxwell material. These led to stringent conditions on the admissibility of Love waves which are essentially determined by the boundary conditions at the interface joining the elastic crustal layer with the underlying Maxwell half space. The stringency of these admissibility conditions implied a cut off of admissible periods and thereby indicated that the Maxwellian properties of the upper mantle, inferred from the phenomenological description of the seismic process, would produce, in seismic signatures of earthquakes, features by which its specific inelastic mechanical properties can be identified. To our knowledge, this indeed was the first step taken, with purpose, toward introducing inelastic properties in mathematical seismological models of the earth and, in particular, Maxwellian inelastic features which had been inferred as essential for sustaining the seismicity of the earth.



This investigation concerning Love waves was then extended to the study of Rayleigh surface waves in a half space consisting of a Maxwell material with the purpose of establishing the conditions for the admissibility of such Rayleigh waves. <sup>(3,4)</sup> As in the case of the surface Love waves, we also found here that the conditions for the admissibility of Rayleigh waves propagating over a Maxwell half space are more stringent than are the admissibility conditions obtained for Rayleigh waves propagating over an elastic half space. This result further reinforced the conclusion that the Maxwellian constitution of the earth, and of the upper mantle in particular, should lead to discernable features in seismic signatures of earthquakes, and conversely that these discernable features may be useful for indentifying the Maxwellian inelastic properties of the earth in terms of appropriate seismic models of the earth which mathematically represent its Maxwellian constitutive features.

These two preliminary results gave good reason to conclude that the then prevailing tradition in theoretical seismology which clearly overlooked and consequently strongly de-emphasized the fundamental role of the inelasticity of the earth in producing and in sustaining its seismicity and its tectonic phenomena must be radically changed. Indeed, had this fundamental fact been previously recognized, clearly every effort would have been made to appropriately incorporate, with particular emphasis, in the mathematical seismological models, the inelasticity as a fundamental feature of the earth. With this realization, a procedure was conceived <sup>(5)</sup> and then presented wherein the elastic moduli appearing in various traditional mathematical seismological models of the earth are replaced by complex moduli. In this regard, we then emphasized that the pure imaginary parts of these complex

moduli that represent stresses proportional to corresponding elastic stresses but, which by their construction, lag them by  $90^\circ$  phase, are consequently non-conservative, furnish a first approximation for representing the dissipative effects produced by very small deviations from perfect elasticity, without however representing in constitutive terms the nature of the inelasticity of the materials in which the dissipation is produced.

Although it was understood at that time that this procedure provides a framework for relating wave attenuation to dissipation due to inelastic properties of the materials of the earth, it was also stressed that this model does not and can not give any information concerning the specific inelastic constitutive properties of the earth. This should be evident since one has to formally portray in the mathematical models the essential constitutive features of the earth in order to determine them numerically from seismic data.

The above idea and procedure were communicated to D. L. Anderson in 1962, both in lecture and privately, and subsequently used by him and Archambeau in developing a mathematical seismological model of the earth in terms of which they calculated from seismic data a distribution of the so-called quality index 'Q' in the earth. This was done apparently without realizing the importance of taking into consideration the nature of its inelasticity of the earth, and of its proper representation in constitutive terms as required for analytical and numerical investigation of its observable and measureable consequences. Therefore, they erroneously concluded that this quality index 'Q' is frequency independent, an error which can be directly attributed to the fact that their model did not include an equally important basic feature deduced from the phenomenological description of the seismic process, namely, its Maxwellian inelastic property as discussed earlier.

This serious omission also led Anderson to the denial of the possibility of the  
(6)  
convection current in the upper mantle.

In this regard, it is instructive to note that recently a comprehensive  
(7)  
paper by D. D. Jackson on attenuation of seismic waves emphatically reports that  
a critical examination of attenuation data in the context of a recent analytical  
(8,9)  
development of Backus and Gilbert leads inescapably to the conclusion that the  
(10)  
thesis advanced by Anderson and Archambeau on the frequency independence of the  
'Q' of the earth is in fact untenable; a conclusion which follows directly from  
the phenomenological Maxwellian model of the earth originally inferred from the  
phenomenological description of the seismic process, and which had been reported  
by the senior author with considerable emphasis since 1950. This is particularly  
(11)  
noteworthy since D. D. Jackson had collaborated with D. L. Anderson in the publi-  
cation of an earlier paper pertaining to the representation of the inelastic  
features of the earth in terms of the quality index 'Q', and he is consequently  
well versed with the basis of the inferences drawn by Anderson and Archambeau on  
the frequency independence of 'Q'. Moreover, the expression for the internal fric-  
tion presented by Jackson on page 31 of his paper, for the accomodation of atten-  
uation data and which clearly displays its dependence on frequency, does in fact  
correspond to a Maxwellian material.

This development significantly substantiates the thesis that all subsequent  
developments in geomechanics which are compatible with reliable measurements must  
necessarily comply with the three essential mechanical phenomenological features  
of the phenomenological mechanical model of the earth which prove to be central in  
the dynamical processes that attend the evolution of earthquakes ascribed to the

primary seismic motivating force as conceived later in 1965. Even though we were in fact responsible for the idea to introduce complex moduli as a first step for extending the mathematical theories of elastic seismology to corresponding theories of inelastic seismology, we were nevertheless well aware that this approach was essentially limited, particularly since such mathematical theories will not circumscribe certain essential features of the phenomenological mechanical model. This led to the second stage of our work which concerns the development of adequate and admissible mathematical theories of inelastic seismology which, for reasons already given above, must necessarily agree with the essential features of our fundamental phenomenological mechanical model of the crust and mantle. The development of such admissible theories of inelastic seismology accordingly demands the reconciliation of constitutive Maxwellian models of the upper mantle with seismic data.

This second stage was initiated by modeling the crust and upper mantle as a layered configuration, each layer consisting of the simplest Maxwellian material, namely a Maxwell body constitutively defined. As a crucial test of this model, we inquired analytically concerning conditions for its reconciliation with Love wave attenuation data. This reconciliation, however, demands that the viscosity coefficient of the layers representing the upper mantle in this model be many orders of magnitude smaller than the accepted value calculated by Haskell<sup>(12)</sup> using the Fenoscandian recoil data following the removal of the iceload. Clearly, such reconciliation would be untenable if Haskell's calculated value is indeed representative of the actual viscosity of the upper mantle, and this, of course, would seriously challenge the credibility of our basic phenomenological mechanical model.

However, since the phenomenological mechanical model was logically inferred from the phenomenological description of seismic processes, which includes virtually indisputable facts, our confidence in the validity of this phenomenological mechanical model was naturally sustained and this gave compelling reason to critically examine the theoretical basis for Haskell's calculations. This examination led to the crucial question; whether the Fennoscandia recoil data which Haskell used is reconcilable with a three layered half space of Maxwellian material which includes a thin layer of very low viscosity situated under the crust. This question was formulated and resolved affirmatively in mathematical terms. In addition, Haskell's theory is recovered in this formulation as a limiting case when the two upper layers are removed. Therefore, this basic phenomenological mechanical model and this particular constitutive model based upon it readily accommodate both the seismic phenomena which are produced in a very short time scale as well as the recoil data associated with the Fennoscandia uplift that occurred over a very long geological time period. This joint accommodation demands the existence of a thin and very low viscosity Maxwellian layer underlying the crust. It should be evident that this has important ramifications regarding continental drift, convection currents, plate tectonics, etc. Moreover, as it will subsequently be shown, this low viscosity layer, as deduced from the phenomenological mechanical model, significantly increases the stresses in the crust produced by the primary tectonic and seismic motivating force and is instrumental toward elevating these stresses to levels that can produce seismic events.

(16,17)

Quite recently, Tryggvason in an attempt to determine the characteristics of a model in which an elastic plate overlies a fluid substratum and which is consistent with the tilt measurements obtained in Iceland, found that the viscosity of the fluid layer beneath the elastic plate cannot exceed  $10^{13}$  poise. This important

result obtained by Tryggvason based on tilt measurements from 1967 to 1971 further substantiates the basic nature of our phenomenological model of the earth, in so far as our fundamental phenomenological model inevitably led to analytical investigations that, in fact, predicted the existence of such a low viscosity layer in the upper mantle two years before Tryggvason's results were published. (14,15)

Another important aspect of this historical development concerns the conception and mathematical formulation of a simple constitutive model of the crust and mantle which concurs with our basic phenomenological mechanical model and which quantifies, with approximation, the seismic process that led to the conception of this phenomenological model. This particular constitutive model provides a mathematical framework that links analytically and numerically, the observable and monitorable features on the surface of the earth, such as displacements, strain, tilt, etc. measured in a region around an active fault with the attendant changes in the stress field within and throughout the crust and upper mantle, and with the relaxation time constants of the Maxwellian mantle. In this procedure, we adopt and follow a working principle based on a selective rule, namely, that in the construction of constitutive models designed to quantify the phenomenological description of the seismic mechanism, we first select the simplest constitutive members of the class of Maxwellian materials, admitted by this description, and then progressively increase the complexity of these constitutive models only in so far as dictated by refined measurements of observable phenomena and by new facts. This, we believe, insures that the analysis and numerical calculations are not overburdened by unnecessary complexity of the constitutive models for the purpose of accomodating the given data and furnishing the information sought.

Within this mathematical framework, a three-dimensional boundary value problem in static linear elasticity was formulated as an approximate formal characterization of the phenomenological model for the crust-mantle system of the earth. (18,19) The system is considered as a two-layered half-space, where elastic and inelastic properties are attributed to both media. It was assumed that both materials are incompressible. A Volterra dislocation, representing a fault plane, is imbedded in the upper layer, lying in a vertical plane with slip parallel to the free surface. The problem is solved by means of a modified form of the Galerkin vector and use of double Fourier transforms. Certain analytical solutions are obtained in quadrature for the surface displacements and for some stresses at the interface. Time dependent properties are introduced into the model by means of Biot's correspondence principle of linear viscoelasticity. The exhaustion of the information rendering capacity of this mathematical model of the seismic mechanism requires extensive numerical calculations which are readily tractable, but which we were unable to carry out because of lack of funding.

We wish to stress, in this regard, that this mathematical model, if fully exploited, already provides a framework for developing a numerical model of the seismic mechanism which would numerically link the surface measurements, such as tilt, strain, etc., with the stresses within and throughout the crust and mantle. The development of such a numerical model of seismic mechanism has indeed quite recently become a major concern of individuals actively committed to earthquake prediction.

## II. THE CONCEPTUAL BACKGROUND OF THE PRIMARY TECTONIC AND SEISMIC MOTIVATING FORCE

In the original phenomenological description of the seismic process which led to the conception of the phenomenological mechanical model of the Earth, as discussed in Part I, the source of the dynamical factor responsible for motivating the seismic process described therein was considered as time independent, but otherwise not specified nor restricted. However, a Primary Tectonic and Seismic Motivating Force (PTSMF) was subsequently conceived by the senior author\* in 1965 on the basis of the Universal Physical Constants, which led to the concept of Primacy of Force and the Principle of Maximum Uniformity. In this part of the report, we shall outline this previous development that provided the basis for the numerical studies on verification of the PTSMF as subsequently carried out under this present contract.

### A. Theoretical Basis of the PTSMF----Primacy of Force

The focus and impetus which led to the conceptual framework in which the PTSMF was discovered are the Universal Physical Constants. This conceptual framework necessarily assigns to all forces in nature a position of primacy by ascribing to them the role of constantly linking and everywhere dynamically reconciling the universal and immutable features of the time-space structure with specific phenomena and actual events, that is; the fundamental role of dynamically reconciling Universality and Specificity in all natural phenomena.

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\* The discovery of this motivating force was outlined in an invited lecture presented at the National Earthquake Research Center of the United States Geological Survey, Menlo Park, California in March 1965, and subsequently amplified in lectures given at the Department of Geology, University of California at Davis and the National Earthquake Research Center of the United States Geological Survey, Menlo Park, California in 1973.



This development necessarily compelled a critical examination of the Principles of Classical Mechanics with the expectation of being able to substantiate within its limited conceptual framework the inferences drawn on the primacy of force from the Universal Physical Constants. For this purpose, the senior author has reformulated the principles of classical mechanics by adopting a procedure which treats force as primitive, that is; as fundamental and undefined. This leads to the concept of a force configuration which is then used to precisely define, on the basis of Newton's fourth axiom on the compounding of forces, a particular class of force configurations, which are endowed with a particular dynamical aspect of uniformity, namely the class of equilibrium force configurations. This class of precisely defined equilibrium force configurations was then used to formulate what might appropriately be called the fundamental principle of mechanics insofar as it evidently incorporates in a single proposition Galileo's principle as well as Newton's second and third laws. Moreover, its domain of validity is not necessarily restricted to classical mechanical phenomena insofar as this fundamental dynamical principle of force equilibrium is not predicted on the model which Galileo's principle and Newton's law of motion are necessarily limited. This proposition asserts: <sup>\*</sup> 'That every realizable force configuration is necessarily an equilibrium force configuration and that this aspect of uniformity, namely equilibrium, is constantly, uniformly and precisely maintained in nature, at all times, at all locations and for all bodies.' From this formulation, it directly and incisively follows that:

(a) The restrictions on mechanical phenomena expressed and/or implied by the fundamental principle of mechanics do not define and, in principle, do not determine the forces in terms of which they are enunciated. Consequently, force is

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\* See footnote on page 13.

not subsumed under the known principles of mechanics, since in principle, it is not determined by them. Therefore, the forces in terms of which the known principles of mechanics are formulated are essentially independent of these principles.

As corollaries of (a) we obtain:

(b) The principles of classical mechanics (PCM) do not determine the forces by which they are enunciated and by which they are dynamically and uniformly sustained in nature. Forces are therefore in principle not determined by the PCM;

(c) That the PCM do not distinguish and consequently do not specify mechanical systems, either formally or actually;

(d) That the PCM do not discriminate between conservative and non-conservative mechanical systems;

(e) That the PCM are aspecific. That is, the restrictions they uniformly invoke on all mechanical systems do not distinguish between them and consequently do not specify them;

(f) That the PCM are historically passive, that is; they neither deny or affirm the historical process;

(g) That the PCM neither affirm nor deny reversibility;

(h) That the PCM are acausal and do not axiomatize the causal, i.e.; the evolutionary context of the forces by which they are enunciated.

These developments produced the concept of mechanical speciation and the realization that forces, in addition to sustaining dynamically an aspect of uniformity which, according to the fundamental law cited above is uniformly maintained in all classes and subclasses of mechanical systems, also specify and thereby distinguish particular classes, as well as identify physically actual mechanical systems. Indeed, from these results we see that within the conceptual framework

of classical mechanics, forces maintain the dynamical features which are universal for all mechanical systems, as well as specify particular classes and actual dynamical systems; thereby, in fact, linking and reconciling their universal and specific mechanical features.

Forces Unify and Specify. They Reconcile Unity in Diversity.

#### B. The Discovery of the PTSMF

Based on the Universal Physical Constants and the Principle of Maximum Uniformity, we conceived, in 1965, a primary tectonic and seismic motivating force (PTSMF). This primary tectonic and seismic motivating force is linked with the historical development of the earth and is the dynamical aspect of its mechanical evolution. However, it is not implied by the principles of classical mechanics since, as explained in Section A, these principles are essentially historically passive, that is; they neither affirm nor deny the historical process on which this primary motivating force depends. All mechanical phenomena produced in the earth are accordingly understood to be essentially products of its mechanical evolution and the dynamical consequences of the primary tectonic and seismic motivating force.

The PTSMF essentially originates from six principal factors:

- (1) The rotation of the Earth;
- (2) The inelasticity of the Earth, as originally inferred from a phenomenological description of the seismic process, a description which incorporates virtually indisputable phenomenological features of this process;
- (3) The Maxwellian upper mantle;
- (4) The non-uniformities in mechanical constitution of the Earth which specify and thus identify the actual Earth mechanically;

(20-23)

(5) The Principle of Maximum Uniformity applied conceptually and heuristic-ally to produce algorithms that link analytically and numerically the category of general information, which contains the fundamental principle of mechanics, to the categories of specific and concrete information which include answers to specific questions pertaining to the mechanical evolution of the Earth and which are not implied by the known propositions of classical mechanics; and

(6) The development of specific hydrodynamical ramifications of these algorithms which are relevant to the calculation of stresses and deformation produced by the PTSMF in the mantle, and which have led to the formulation of the hydrodynamical Variational Principles that augment the Navier-Stokes Equations. These include the original formulation of the Hydrodynamical Principle of Minimum Dissipation recently applied by Prigogene, et.al. to biophysical questions with some success, and the Hydrodynamical Principle of Virtual Displacements used in conjunction with the Finite Element Method as a numerical augmentation to the Navier-Stokes Equations.

Subsequent to the conception of the primary tectonic and seismic motivating force noted above, an analytical and numerical procedure was formulated for the purpose of calculating the stress and deformation fields produced by this force in mechanical models of the Earth. This analytical and numerical procedure was the basis of the original proposal that led to the initiation of this contract for the numerical verification of the PTSMF. Since the scientific and practical ramifications of this comprehensive development in Geomechanics remain to be fully explored, which unfortunately we have been unable to do under the present contract because of insufficient funding, the detailed presentation of this development will be given in subsequent publications when this task is satisfactorily fulfilled.

### III. NUMERICAL RESULTS AND VERIFICATION OF PTSMF

#### A. Preliminary Remarks

Observable consequences and seismic ramifications of the primary tectonic and seismic motivating force (PTSMF) are analytically and numerically examined by calculating the stresses and deformations it produces in a hierarchy of mechanical models which constitutively portray and thereby specify the Earth with increasing mechanical non-uniformity. The results of these numerical calculations thus provide an important test of verification of the PTSMF and were produced with this principal objective in mind, namely, to ascertain whether the stress fields produced by the PTSMF even in comparatively primitive mechanical models of the Earth can, in order of magnitude as well as in configuration, account for the stresses required to produce and to sustain tectonic and seismic activity in known seismically active areas. For this purpose, it appears sufficient to consider limiting Maxwellian mechanical models of the Earth in which the relaxation times are virtually infinite. The stress and deformation fields produced by the PTSMF in these limiting Maxwellian models may consequently be considered as snapshots of the stress and deformation fields evolving historically under this force in space and time.

Our study of predictable and observable manifestations of the Primary Tectonic and Seismic Motivating Force in terms of a hierarchy of mechanical models of the Earth which progressively depict its mechanical non-uniformity with increasing specificity, has led to a new basis for developing a deep and powerful synthesis of the geological and geophysical perspectives on the science of the Earth. Particular

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members of this hierarchy of mechanical models are distinguishable by the order and degree of specificity by which they depict the mechanical non-uniformity of the actual Earth.

To fix ideas we find it helpful to introduce here the concept of orders of non-uniformity which pertain to fundamentally distinct aspects of the mechanical non-uniformity of the Earth.

By this concept, the prominent mechanical non-uniformity of the Earth which pertains to its globally stratified structure is conceived as a first order mechanical non-uniformity which necessarily has global ramifications and which accounts for the production of a high threshold level of stress in the crust which originates from the primary seismic motivating force. The high threshold of stress associated with this first order non-uniformity is an aspect of what might appropriately be called the primordial stress field of the Earth, since this field is associated with a mechanical non-uniformity which evidently was established during the very early history of the Earth and which has since persisted with considerable stability. The stability of this first order mechanical non-uniformity and of the associated primordial stress field which it produces in conjunction with the Primary Tectonic and Seismic Motivating Force, is understood here to be an aspect of the Principle of Maximum Uniformity which is the theoretical basis of our work in geomechanics.

Accordingly, the concentric layered material sphere is a configuration which reconciles within a finite domain maximum geometrical uniformity with minimum substantial non-uniformity. The homogeneous (unstratified) sphere is of course an ideal body which unifies within a finite domain the highest attainable aspects of substantial and geometrical uniformity, but which, however, is virtually unrealizable when its parts are not uniformly subjected to motivating forces. When such

mechanical non-uniformities prevail and are sustained by the physical environment of a homogeneous sphere, then according to the principle of maximum uniformity, the homogeneous sphere progressively adopts to the persisting mechanical non-uniformities that are impressed upon it by producing a homogeneously concentric layered structure in which the mechanical non-uniformities are localized at the interfaces that join the virtually homogeneous layers. By so doing, the concentric homogeneously layered sphere accommodates persisting mechanical non-uniformities which may be produced by its environment, by deviating minimally from an ideally uniform, that is, homogeneous sphere. These observations help us to place in proper perspective the very encouraging results obtained and presented in this part of the report from a number of models belonging to the hierarchy of mechanical models of the Earth, noted above.

The first results were obtained for a set of mechanical models of the Earth which incorporate only the first order mechanical non-uniformities which obtain from the essentially concentrically stratified structure of the Earth, which on a global scale is highly stable. The primordial stress field produced by the Primary Tectonic and Seismic Motivating Force in conjunction with this first order and highly stable mechanical non-uniformity of the earth, in a significant sense, virtually dominates the stress field of the Earth, except where higher order mechanical non-uniformities which depend on latitude and longitude are comparatively significant. Such higher order mechanical non-uniformities are relatively significant in the crustal layer and particularly in transitions from oceanic to continental structure.

In this context, we can refer to the mechanical non-uniformities associated with deviations in the primordial layered structure of the Earth from perfect

spherical symmetry, as mechanical non-uniformities of the second order. The mechanical non-uniformities associated with changes in crustal structure and constitution, that correspond to the oceanic and continental regions, we shall refer to as mechanical non-conformities of third order. The mechanical non-uniformities associated with increasingly local features which mechanically specify, and thereby indentify, a particular location of the Earth comprise a set of mechanical non-uniformities with increasingly higher order.

We have calculated the stress fields produced by the Primary and Tectonic and Seismic Motivating Force in a set of models of the Earth which incorporate only first order mechanical non-uniformities which are associated with the primordial layered structure of the Earth depicted as a concentric homogeneously layered sphere. The results of this first set of calculations which, we believe, correspond to the primordial stress field of the Earth, are most encouraging, as they reveal prominent latitude dependent stress patterns which correspond to known tectonic features in areas which have been carefully explored. These areas include Anchorage, Alaska and California, among others. Moreover, the first set of calculations produced stress fields which in magnitude, configuration and distribution give compelling reason to ascribe the mechanical aspects of the evolution of the Earth to the Primary Tectonic and Seismic Motivating Force, which was originally conceived in 1965 as the dynamical manifestation of its mechanical evolution. The historical development of the figure of the Earth and its tectonic and seismic features are in this context understood to be particular aspects of its mechanical evolution.

The results obtained in the second set of calculations were obtained for a set



of models of the Earth which incorporate first order, as well as second order mechanical non-uniformities which include mechanical non-uniformities that correspond in first approximation to the oceanic and crustal features of the earth. These results imply tectonic features on a global scale which are strikingly substantiated by observation. Specifically, these results imply a mirror image relation between the San Andreas Fault with its attendant stress field, and a corresponding prominent fault system at the latitude of the China mainland. Such a fault system has indeed been recently reported by Tuzo Wilson following a recent visit to the Institute of Geophysics in China.

## B. Mechanical Models and Tests for Verification

### (1) Set 0

The first set of mechanical models in this sequence which we designate as the zeroth set consists of homogeneous spheres which are consequently maximally uniform in geometry as well as in mechanical constitution. The non-uniform force field created by the uniform rotation about a diameter of the sphere produces a non-uniform stress field with respect to latitude. However, the magnitude of the stresses produced in this non-uniform stress field is insufficient to account, in order of magnitude, for stresses necessary to produce seismic phenomena. Therefore, we shall not consider the results obtained in this case further.

### (2) Set I

#### (a) Mechanical Non-uniformities

The mechanical models of Set I incorporate the mechanical non-uniformities of primordial earth which were produced early in its history and evidently sustained since then with considerable stability. This set of mechanical models consists of four concentric layered spheres representing the core, lower mantle, upper mantle and the crust. The mechanical properties, except the density, are assumed uniform within each layer, but differ from layer to layer. This set of models therefore preserves maximum uniformity in geometry, as in set zero, but has a minimal non-uniformity in its mechanical constitution.

For a limiting Maxwellian model where the viscosity coefficients  $\lambda'$  and  $\mu'$  are virtually infinite, the mechanical properties can be characterized by the density  $\rho$  and the two elastic moduli  $\lambda$  and  $\mu$ . Altogether, numerical calculations have been performed for eight different combinations of values of  $\rho$ ,  $\lambda$ , and  $\mu$  assigned to each of the four layers with  $\lambda'$  and  $\mu'$  infinite throughout (Table I) in this set

of mechanical models. The first seven models assume that the density varies in the radial directions from the center of the core to the surface of the earth as shown in Figure 1. However, the density is assumed constant across each layer in model VIII (see Table I and Figure 1).

(b) The Numerical Results for the Stresses

Models I to VI collectively demonstrate the effect of the shear modulus  $\mu$ , as it varies from layer to layer, on the magnitude of the stresses. In general, it can be stated that as the value of  $\mu$  is progressively increased from the core to the crust in various models while  $\lambda$  and  $\rho$  are maintained fixed in these models, higher values of the stress components  $\sigma_{\phi\phi}$  (in east-west direction) and  $\sigma_{\theta\theta}$  (in north-south direction) (Figure 2) are produced by the PTSMF in the upper layers. To illustrate this, let us consider the numerical result for  $\sigma_{\phi\phi}$  obtained from models IV and VI (Figure 3). We note that the mechanical properties are the same in the core, in the lower mantle, and in the crust of these two models (see Table I), whereas the value of  $\mu$  in the upper mantle of model VI is about half the value assigned to the upper mantle of model IV. As a result, the magnitude of  $\sigma_{\phi\phi}$  in the upper mantle of model VI is smaller than it is in model IV. We see, however, that this greatly increases the stress  $\sigma_{\phi\phi}$  in the crust of model VI as compared with model IV. This clearly shows that a reduction in the competence of a particular layer to support a load in shear produced by the PTSMF when it is in a fixed state of deformation results in an increase in level of stress in an overlying layer which has a higher shear modulus. Significantly, these particular numerical results concur beautifully with the phenomenological description of the seismic process based on relaxation phenomena and which led to the conception of a phenomenological Maxwellian mechanical model of the Earth; a phenomenological model

endowed with mechanical features that are essential to produce and sustain the PTSMF as an evolutionary mechanical force.

It is further noted that stress concentrations in  $\sigma_{\phi\phi}$  and  $\sigma_{\theta\theta}$  are produced by the PTSMF at interfaces of two layers where discontinuity in the mechanical properties occurs. These stress concentrations attain maxima at the interface joining the crust and upper mantle as well as at the interface joining the upper and lower mantle. Moreover, in this set of primordial mechanical models, the normal stress component  $\sigma_{rr}$  (in the radial direction) is in general small. It is of the same order of magnitude as  $\sigma_{\phi\phi}$  and  $\sigma_{\theta\theta}$  in the core and lower mantle, but decreases rapidly toward the surface. In addition, the shear stress  $\sigma_{r\theta}$  in these models is everywhere small.

#### (c) Tests for the Verification of PTSMF

Among the primordial models I through VI, only models IV through VI, and in particular model VI, yield sufficiently high stresses to cause tectonic and seismic events in the upper 12% of the Earth's surface; i.e., in the upper mantle and the crust. Consequently, only the numerical results obtained from model VI will be used here to test the verification of the PTSMF as the primary motivator of the tectonic and seismic phenomena of the Earth, both globally and locally.

The numerical results of the stress components  $\sigma_{\theta\theta}$  and  $\sigma_{\phi\phi}$  obtained from model VI are presented in Figures 4 and 5, respectively. As these results are obtained in the primordial model in which mechanical properties do not vary in the  $\phi$ -direction; i.e., with respect to longitude, the magnitude of these stress components remains unchanged for any particular latitude.  $\sigma_{\theta\theta}$  is, in general, compressive, except in the upper 2-3% of the crust at and near the equator. However,

$\sigma_{\phi\phi}$  changes gradually from compression in the polar region to tension at a latitude of about  $45^\circ$  and attains a maximum in tension at the equator. Since in this model  $\sigma_{rr}$  and  $\sigma_{r\theta}$  are small everywhere in the mantle and the crust,  $\sigma_{\phi\phi}$  and  $\sigma_{\theta\theta}$  are essentially the principal stresses. The principal planes therefore are perpendicular to the spherical layers and are at right angles to the longitude and latitude. Consequently, the planes of maximum shear stress are at  $\pm 45^\circ$  with respect to the longitude and latitude.

In order to verify the hypothesis that the PTSMF is primarily responsible for motivating the tectonic and seismic phenomena of the Earth, both globally and locally, we shall examine the numerical results obtained for the stresses, in their magnitude and distribution, and resolve them along certain known geological features such as the San Andreas Fault in California, U. S. A., the Tancheng-Lukiang Fault Zone in Shantung, China and the region around Anchorage, Alaska, U.S.A. (Figures 6 and 7).

The San Andreas Fault is situated approximately between the latitudes  $30^\circ$  and  $40^\circ\text{N}$  with a strike in NW-SE direction. It is a recognized fact that the land mass west of the San Andreas Fault is moving in a northwesterly direction relative to the land mass east of the fault. This motion clearly implies a large shear stress along this fault, which is necessary to produce it and dynamically sustain it. The calculated primordial stress field in this region yields a tension in  $\sigma_{\phi\phi}$  and compression in  $\sigma_{\theta\theta}$ . Since as noted above  $\sigma_{\phi\phi}$  and  $\sigma_{\theta\theta}$  are, for all practical purposes, the principal stresses, one of the planes of maximum shear stress is at  $45^\circ$  with the principal planes and therefore at that particular region coincides with the San Andreas Fault. Furthermore, the orientation of the shear stress along this plane coincides with the known movements of the land masses on the two sides

of the fault, i.e.; the shear stress is directed toward southeast on the eastern side and northwest on the western side of the fault; and the magnitude of this shear stress is sufficiently high and is equal to 165 bars; about fifty percent of the lower limit of the crushing strength of granite (see Figure 8).

(29)

Correspondingly, the Tancheng-Luking Fault in China which runs in SW to NE direction from Shantung Province, Po Hai to Lianoning Province in the north (from  $30^{\circ}\text{N}$  to  $50^{\circ}\text{N}$  latitude) may be considered, according to the description of the Chinese geophysicists as reported by Professor J. T. Wilson, as the mirror image of the San Andreas Fault produced with respect to the Pacific Ocean. In this region, the land mass east of the fault is apparently moving in a northeasterly direction relative to the land mass west of the fault. Here again, one of the planes of maximum shear stress resulted from the calculated primordial stress field coincides with this fault and the orientation of the resolved shear stress is in accord with the movements of the land masses on the two sides of the fault. The magnitude of this shear stress is equal to 165 bars.

Now, let us consider the region around Anchorage, Alaska, U. S. A.. Anchorage is situated at a latitude of about  $60^{\circ}\text{N}$  at the eastern end of the Aleutian Volcanic Arc. On March 27, 1964, an earthquake of magnitude 8.4 based upon surface wave amplitudes ( $M_s$ ) occurred in a vast region around Anchorage and major tectonic deformation appeared in a segment of the continental margin lying between the Aleutian Trench and the Aleutian Volcanic Arc. Post earthquake investigations suggested that compressive stress tangential to the surface was dominant on land within the region affected by tectonic movements during the earthquake and the maximum stress axis was oriented approximately normal, or at a small oblique angle to the

(30)

major structural element within the focal region of the earthquake, i.e.; the Aleutian Trench and the Aleutian Volcanic Arc. Resolution of the calculated primordial stress field in this region yields a horizontal compressive stress equal to seventy-five percent of the breaking strength of granite in compression ( 270 bars) in the direction perpendicular to the Aleutian Volcanic Arc (Figure 8). This is in very good agreement with the results of the investigations mentioned above.

In summary, the calculated primordial stress field obtained from certain mechanical models of the earth in Set I as a consequence of PTSMF has yielded a pattern of stress distribution which is in remarkable agreement with the known geological activities along the San Andreas Fault and the Tancheng-Lukiang Fault as well as in the region around the Aleutian Volcanic Arc and the Aleutian Trench. The magnitude of these calculated primordial stresses obtained from such mechanical models is sufficiently high for sustaining the tectonic and seismic activities in such regions, if not for producing these features. From this, we conclude that PTSMF is indeed primarily responsible for motivating the tectonic and seismic phenomena of the earth, both globally and locally.

(d) Remarks

Calculations have been performed to determine the effect of the density and elastic modulus  $\lambda$  on the calculated stress and deformation fields. In model VIII, the value of  $\lambda$  in the core has been increased to four times the value of model IV; and in model VIII, the density is assumed to be constant in each layer. In both cases, the magnitude and the pattern of the calculated stresses and deformations are not significantly different than those obtained from model IV.

However, these results must be considered as indicative rather than conclusive with respect to the effects of  $\lambda$  and  $\rho$  on the stress and deformation fields until more numerical results can be obtained for wider combinations of  $\lambda$  and  $\rho$  values.

### (3) Set II

#### (a) The Mechanical Non-Uniformities

In Set II, the prominent mechanical non-uniformities on the surface of the Earth, i.e.; the oceans and the continents, are incorporated into the mechanical models considered. In order to simplify the analysis and numerical calculation, the mechanical properties  $\rho$ ,  $\lambda$  and  $\mu$  in the crustal layer are assumed to vary in both  $r$  and  $\phi$  directions in the following manner:

$$\bar{\rho} = 1 + f_1(\bar{r}) \cos 2\phi$$

$$\bar{\lambda} = 1 + f_2(\bar{r}) \cos 2\phi$$

$$\bar{\mu} = 1 + f_3(\bar{r}) \cos 2\phi$$

These, therefore, depict models of equal area for the oceans and the continents without sharp discontinuities as in the actual earth, in topographic and in mechanical properties at the boundaries of the oceans and the continents, and may be appropriately called idealized oceanic and continental models. It should be kept in mind that the results obtained from these models would only give qualitative indications of the effect of the non-uniformities of the mechanical properties in  $\phi$  direction on the stress and deformation fields as compared with the actual Earth.

#### (b) The Numerical Results for the Stresses

In the numerical calculations, the mechanical properties in the core, lower mantle and upper mantle are assumed the same as those of model IV, Set I.  $f_1(\bar{r})$ ,  $f_2(\bar{r})$  and  $f_3(\bar{r})$  are taken as second degree polynomials in  $\bar{r}$  with



maximum or minimum values occurring at the mid-point of the crustal layer. Three different sets of values have been assigned to  $f_1(\bar{r})$ ,  $f_2(\bar{r})$  and  $f_3(\bar{r})$  in the numerical calculations. However, the numerical results obtained for the stresses with  $[f_1(\bar{r})]_{\max} = 0.125$  and  $[f_2(\bar{r})]_{\min} = [f_3(\bar{r})]_{\min} = -0.625$  are most interesting.

The general pattern of the stress and deformation fields obtained in all three mechanical models considered is, in two respects, the same as that obtained in Set I:

(1) The stress components  $\sigma_{rr}$ ,  $\sigma_{r\theta}$ ,  $\sigma_{\theta\phi}$ , and  $\sigma_{r\phi}$  are, in general, small in the upper mantle and crust. Therefore, the tangential normal stress components,  $\sigma_{\phi\phi}$  and  $\sigma_{\theta\theta}$ , are essentially the principal stresses there.

(2)  $\sigma_{\phi\phi}$  is compressive in the polar region, becomes a tensile stress near a latitude approximately equal to  $45^\circ$ , and finally reaches a maximum value in tension at the equator for all longitude.

However, although  $\sigma_{\theta\theta}$  is also compressive in the polar region as in the primordial models of Set I, it might change into a tensile stress at some latitude or remain compressive throughout dependent on the longitude. For this reason, the resolution of the two principal stresses,  $\sigma_{\phi\phi}$  and  $\sigma_{\theta\theta}$ , in the planes of maximum shear stress, sometimes accompanied by tension, extending to the equator where as in the primordial models of Set I, such a region is restricted to certain intermediate latitudes only. Furthermore, the magnitude of the stress components varies in the  $\phi$  direction, as well as in other directions, due to the additional mechanical non-uniformities in the  $\phi$  direction included in this set of mechanical models. These two new factors, namely, the variation in the pattern of  $\sigma_{\theta\theta}$  and in

the magnitude of  $\sigma_{\phi\phi}$  and  $\sigma_{\theta\theta}$  in the  $\phi$  direction, both contribute to produce quite clearly zones of alternately high or low magnitude stress fields. Consequently, seismically active and inactive regions in terms of the stress field can be differentiated in a global scale.

(c) Tests for the Verification of PTSMF

As in Set I, we will proceed, by using the numerical results of the stress field obtained in this set of mechanical models, to further verify the hypothesis that the PTSMF is indeed the primary motivator for the tectonic and seismic activity of the Earth, both globally and locally. For this purpose,  $\phi = 0$  is assumed to locate at the mid-points of the Pacific Ocean.

The resolution of the calculated stress field obtained from this set of mechanical models along the San Andreas Fault, the Tancheng-Lukiang Fault and around the Anchorage region yields similar results as those obtained from the corresponding models of Set I, both in magnitude and pattern of the stresses (Figure 9). In addition, the calculated stress fields are given in Figure 9 for the seismically active regions around Tokyo (pure shear stress), Kamchatka (large compression and shear) and Managua (large tension and shear). The magnitude of the calculated stresses in these regions are all sufficiently large to produce seismic events. Unfortunately, verification of the calculated stress fields in these latter regions is not possible due to lack of measurements of the actual stress fields.

Figure 10 shows the resolution of the calculated stress field along the Mid-Atlantic Ridge and the West Coast of Norway, Britain and Portugal. Measurements (31) of the actual stress field in these regions have been made by Hast. The technique of Hast's measurement system was developed permitting the determination of

direction and absolute value of rock stress in bore holes directly. The results of the measurements show that the stresses are generally horizontal (i.e.; tangential to the spherical surface) compressive and shear stresses along the west coast of Norway, Britain and Portugal and where the Mid-Atlantic Ridge meets with Iceland. Since the calculated stress field yields  $\sigma_{\phi\phi}$  and  $\sigma_{\theta\theta}$  as the principal stresses near the surface of the Earth, therefore the calculated stresses act on the horizontal surface only. Furthermore, the resolved stresses along the west coast of Norway, Britain, Portugal and Iceland clearly show that the calculated stress field consists of compressive stresses accompanied by shear stresses in these regions. These are in good agreement with Hast's measurement (Figure 10). Moreover, along the northern portion of the Mid-Atlantic Ridge near Iceland, the resolved calculated stress is compressive and accompanied by a shear stress; whereas along the southern portion of the ridge toward the equator, the rift system, the calculated stress is acting in the direction very nearly perpendicular to the rift with sufficiently large tensile stress necessary for producing the rift. These results, again are in accord with the observed geological features of these regions.

#### IV. CONCLUDING REMARKS AND OUTLINE FOR FUTURE DEVELOPMENTS

##### A. Concluding Remarks Concerning the PTSMF

The numerical results presented in this report are obtained from models which portray the primordial mechanical non-uniformities of the Earth in terms of Maxwellian materials for the limiting cases of very long relaxation times. Therefore, the results obtained from these limiting models may be considered as snapshots of the numerical results which would be obtained from the corresponding primordial models of the Earth in which the stress and deformation fields are both space and time dependent in an evolutionary sense.

Using these primordial models, we calculated the stress and deformation fields produced by the PTSMF operating on the primordial mechanical non-uniformities of the Earth depicted in these models. From these numerical calculations, we found that the PTSMF produces, for certain specific plausible mechanical non-uniformities of the Earth, stress fields of sufficient magnitude to activate and to sustain tectonic and seismic phenomena in the Earth, both globally and locally. The geometrical resolution of these calculated stresses along prominent geological features, such as the San Andreas Fault, Tancheng-Lukiang Fault, Aleutian Trench and Volcanic Arc and the Mid-Atlantic Ridge, shows that the calculated stresses, both in magnitude and in configuration, can account for a large percentage of the stresses necessary to maintain or activate these features. In regions along the coast of Iceland, Norway, Britain and Portugal where actual stress measurements have been made, the calculated stress fields are in essential agreement with the measurements. These results clearly provide substantial tests for the verification of the

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hypothesis that the PTSMF is indeed the primary motivator of the tectonic and seismic phenomena of the Earth, both globally and locally.

Furthermore, the results obtained from the mechanical models of Set II show that the stresses would be localized according to the variation of the mechanical properties in the  $\phi$  direction as well as in the  $r$  direction and thereby differentiating seismically active from seismically inactive regions. This convincingly demonstrates, we believe, that there exists a virtually unique relationship between the mechanical non-uniformities of the actual Earth and its stress field and that this unique relationship is indeed dynamically determined by the PTSMF.

In this regard, we would like to mention here that a recent work by D. Pine (32,33) and J. Shaham concerned with estimating the elastic energy level of a reservoir sufficient to sustain seismic activity in conjunction with Chandler wobble and continental drift, is based on a semi-empirical phenomenological theory which is specifically constructed to link the elastic energy of this reservoir with a few global parameters which may be directly determined from observation. In their theory, observational data are used to calculate certain basic coefficients which in turn are used to calculate an energy level of the reservoir. Then by applying the "elastic energy reduction" principle, which is in fact a particular aspect of our principle of maximum uniformity, the authors indeed demonstrate that the polar drift must be westerly, as actually observed, in order to comply with this "reduction principle" used in conjunction with their semi-empirical theory for calculating the release of elastic energy from the reservoir. Accordingly, the theory is thereby constructed, tested and supported on phenomenological grounds when this reduction principle, which is **extraneous** and thus not implied by known

principles of physical theory, is invoked. Although it satisfactorily reconciles phenomenologically prescribed observational data with basic phenomenological aspects of polar wandering, this does not as yet constitute a test of verification of their calculated energy level of the reservoir or account for its source.

It is of interest to note that, although their semi-empirical theory does not provide a theoretical basis for calculating the total energy of the elastic energy reservoir with which it is principally concerned and which they, in fact calculated semi-empirically and thus phenomenologically from observational data, it nevertheless tacitly includes certain essential features as well as a principle which are, respectively, particular aspects of certain fundamental features and a new fundamental principle which are necessary to produce and to sustain the PTSMF, which was previously indentified as the principal motivator of tectonic and seismic phenomena in the Earth. These include (1) geometrical and mechanical non-uniformities of the Earth, (2) inelasticity, (3) rotation, (4) phenomenological approach to geomechanics and (5) the principle of maximum uniformity. Furthermore, the energy of the "elastic energy reservoir" which, on the basis of our work, is evidently produced and sustained by the PTSMF, is shown by Pine Shaham, on rather convincing semi-empirical and phenomenological grounds, to be sufficiently high in energy content to account for most geophysical processes. This clearly amounts to a further test of verification of the PTSMF.

In summary, since the numerical results obtained so far lead to certain definitive facts and evidence which strongly support the conclusion that the PTSMF is indeed the primary motivator of tectonic and seismic phenomena in the Earth, and since this force places stringent and highly specific restriction on

the relationship between the actual mechanical constitution of the Earth and known geological features and geophysical facts, it is necessary to critically examine and thereby revise the conventional elastic seismological models of the Earth on the basis of the PTSMF and the fundamental phenomenological mechanical model of the Earth presented in Part I, which, in turn, points up the fundamental need for the developments of mathematical theories of inelastic seismology.

B. Specific Objectives and Tasks for Future Development

When the test of verification of the PTSMF has been substantially completed by reconciling the seismic data used to obtain the conventional elastic seismological models, and if the results continue to be affirmative, clearly then it would convincingly follow that all known and observable geological features which are mechanical in origin must be necessarily attributable to this force and to its operation on specific mechanical non-uniformities of the Earth which together produce these features. Therefore, these known geological features, be they structural or morphological in character, provide, in this context, a rich source of information rendered by the PTSMF for obtaining the mechanical non-uniformities of the Earth which are specifically responsible for producing them. Furthermore, it is also clear that this method can be carried over to the objective of finding new and various kinds of energy and mineral resources which would be correspondingly specified by their specific mechanical non-uniformities.

Therefore, once this important step for obtaining scientific consensus is completed, the PTSMF can then be used with confidence as a fundamental source of information and procedure for retrieving new and additional information on the mechanical non-uniformities of the Earth which mechanically identify the Earth

with increasing specificity. For this purpose, an effort will be directed, in the next phase of our work, toward incorporating realistically in the mechanical models of the Earth, in as much detail as possible, all the known and observed geological features and mechanically non-uniform properties on the surface of the Earth, as well as in the crustal layer, upper and lower mantle, and the core. These geological features may include the overall land mass distributions, mountain ranges, sea floor structures, oceanic ridges, rifts, faults and trenches with increasing detail, and the known non-uniform distribution of the mechanical and geometrical properties, such as thermal non-uniformities in the crust and upper mantle, as well as deviations from spherical uniformity, will be considered. In order to be able to retrieve highly specific information from such highly specific mechanical models of the Earth, sophisticated numerical methods which have already been developed and applied and which are based on a hydrodynamical variation principle and the finite element method <sup>(27)</sup> will be used. This analytical and numerical procedure, augmented by concurrent studies pertaining to the development of new methods in experimental seismology which are based on new mathematical developments in inelastic seismology, will produce an economically feasible capability for retrieving very specific information on the mechanical non-uniformities of the Earth with highly practical and scientific ramifications.

In order to effectively pursue the numerous and far reaching implications and scientific and practical ramifications of the PTSMF, noted above, in conjunction with the phenomenological mechanical model described in Part I of this report, we propose to initiate specific investigations pertaining to two principal objectives, namely, (1) earthquake prediction, control and modification and (2) the identification, with high specificity, of the mechanical non-uniformities of the Earth and its applications to energy and mineral exploration. These two



principal objectives respectively concern (a) a systematic development of a hierarchy of mathematical theories and associated numerical methods of inelastic seismology and (b) the analytical and numerical investigations of a class of constitutive models of the phenomenologically described seismic process that originally led to the conception of the basic phenomenological model; a model which has consistently anticipated and circumscribed subsequent developments in Geomechanics.

A particular constitutive model of the seismic process was originally described and mathematically treated in 1968.<sup>(18,19)</sup> Its formulation in present form already provides a basis for rationally developing a numerical model of the seismic process which operates in accordance with our original phenomenological description of the seismic process. This formulation links the surface displacements with the stress and deformation fields within the crust and mantle in regions surrounding the faults. Furthermore, it facilitates the numerical representation of progressively refined descriptions of this process as dictated by new phenomenological facts and thereby accommodates the representation of increasingly complex Maxwellian rheological features as demanded by these refined descriptions. Moreover, in this regard, we are now able to model and treat numerically the interaction of a crustal layer with materials of the upper mantle which displays non-linear hydrodynamical features arising from the convective transport of momentum in the underlying mantle.<sup>(27)</sup>

A fundamental aspect of the seismic mechanism as constitutively modeled in our earlier work is of course its cyclicity which depends upon the interaction of this constitutive model with a prevailing ambient stress field which was posited there, but without mathematical and numerical representation. With the discovery

of the PTSMF and its subsequent verification, it is now possible to deal with this problem of cyclicity mathematically and numerically by bringing this force to bear on the seismic mechanism as represented by the hierarchy of constitutive and mathematical models of the seismic process. This development, we believe, will also lead, as a by-product, to a rationale for understanding and interpreting observable precursory indices, such as the  $V_p/V_s$  anomaly, which may be useful for the anticipation of forthcoming earthquakes. (34-36)

As a further adjunct of this development, the capability concerning earthquake prediction and control can produce information that will be useful for obtaining new discriminating indices for identifying artificial earthquakes that are mechanically designed to camouflage its detection. This necessarily requires refined physical understanding of the production of wave trains and of their transmission in non-uniform inelastic media and in their associated ambient stress fields, since such knowledge is required by an adversary to mechanically camouflage the event. Such new discriminating indices must therefore ultimately be traced to the fine differences of the phenomenological mechanical features that attend the production of the natural and artificial earthquakes and are consequently responsible for the subtle, but yet discernable, differences in the so-called quality of the seismic signals emanating from them. This is analogous to the unambiguous differences in the quality of production well known in musical acoustics.

#### C. Further Observations Concerning Inelastic Seismology

This section refers to the marked and radical change produced in theoretical seismology with the advent of the realization that the inelasticity of the Earth is a fundamental and thus an essential aspect of its seismicity.

Theoretical seismology started essentially as a mathematical theory of elastic seismology with a basic commitment to retrieve from measurements certain information about the mechanical constitution of the Earth; namely, the distribution of its elastic and inertial properties. With this limited objective in mind, Jeffreys, among others, persuasively demonstrated that the retrieval of this particular mechanical information about the Earth, from seismic data and from constitutive mechanical models, was insensitive to the modeling of the inelasticity of the Earth. This position was developed from the standpoint of a comparatively limited perspective on the seismicity of the Earth, which evidently did not consider the most fundamental mechanical aspect of its seismicity, namely the mechanical phenomena that attend the evolution and the recurrence of earthquakes.

Thus, theoretical seismology evidently started with the preconceived idea that the elasticity and the inertia of the Earth are its only fundamental mechanical properties and accordingly devised mathematical seismological models which are solely committed to the identification of these two properties within the Earth.

But, if one starts out as we did with the realization that inelasticity is a mechanical property on which the seismicity of the Earth depends fundamentally, then clearly the commitment to its numerical identification in terms of appropriate inelastic constitutive models of the Earth used in conjunction with seismic data is virtually inescapable. It is this important new development which is essentially based on the comparatively recent discovery that the inelasticity of the Earth is fundamental to its seismicity, that marked and initiated the radical change in theoretical seismology; a change which leads to the emergence of mathematical inelastic seismology.

However, the transition from elastic to inelastic mathematical seismology presents a formidable challenge in the selection of appropriate constitutive inelastic models from an indefinitely large number of classes of conceivable inelastic materials, a challenge that does not present itself in elastic seismology which refers strictly to only one class of materials. To grapple with this difficult task, and as a matter of procedure, we refer again to the phenomenological mechanical model of the Earth inferred from the phenomenological description of the seismic process which dominates the class of all admissible inelastic constitutive models. By doing so, the indefinitely large number of classes of conceivable inelastic materials is reduced to one admissible class, namely the class of Maxwellian materials. Here again we see that the phenomenological mechanical model indeed provides definite and stringent guidelines and criteria for selecting a class of admissible inelastic constitutive models.

#### D. Concluding Remark

As a concluding remark, we note that the historical description given here of our work in geomechanics, extending over a period of more than two decades, shows that this work is consistently substantiated by results subsequently obtained by other investigators. This important fact clearly demonstrates the power of and constantly adds credibility to our basic capability as a fundamental source of information in geomechanics.

ACKNOWLEDGEMENT

Dr. J. F. Evernden's sensitive perception and appreciation of the conceptual framework that led to the discovery of the primary tectonic and seismic motivating force have been a source of constant encouragement to us. With his support, it was possible to initiate and to carry out extensive numerical calculations for testing the verification of PTSMF reported here under contract with the Air Force Office of Scientific Research and the Advanced Research Projects Agency Grant Number AFOSR70-1949, "Relaxation Phenomena and the Origin and Control of Earthquakes."

We also gratefully acknowledge the helpful support and assistance given by Mr. William Best and Colonel Donald Klick of AFSOR in carrying out this program. Dr. Donald Clements' awareness of the far-reaching implications of our work and his encouragement for its continuation is very much appreciated.

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# REFERENCES

1. P. Lieber, "Relaxation Phenomena and the Origin of Earthquakes," Ph. D. Dissertation, California Institute of Technology, 1950. See also Geophys. J., The Royal Astro. Soc., 14, 1967, pp.439-448.
2. P. Lieber, C. Grubin and K. S. Wan, "Studies on the Propagation of Seismic Waves in Plastic Media," PIBAL Report No. 198, Polytechnic Institute of Brooklyn, May 1952.
3. P. Lieber and K. T. Yen, "Propagation of Rayleigh Waves in Visco-Elastic Materials," supported by the Office of Naval Research, Rensselaer Polytechnic Institute, Technical Report, February, 1953.
4. P. Lieber and K. T. Yen, "A Theory of Rayleigh Waves Based on a Viscoelastic-Plastic Model of the Earth Crust and Mantle," presented at XIII General Assembly of International Union of Geodesy and Geophysics at Berkeley, August 1963, and invited for publication in proceedings. Published in Publications du Bureau Central Seismologique International, Series A, Travaux Scientifiques Fascicule 23, 1964.
5. P. Lieber, "Concerning Surface Waves on a Multilayered Inelastic Earth," presented at the Western Annual Meeting, AGU, Stanford University, Winter 1962. Trans. AGU, March 1963, Vol. 44, No. 1, p. 102.
6. D. L. Anderson, "Earth's Viscosity," Science, Vol. 151, Jan. 21, 1966, pp. 321-322.
7. David D. Jackson, "The Attenuation of Love Waves and Toroidal Oscillations of the Earth," Geophys. J. R. Astr. Soc. (1971), 25, pp. 25-34.
8. G. E. Backus and J. F. Gilbert, "Numerical Applications of a Formalism for Geophysical Inverse Problems," Geophys. J. R. Astr. Soc. (1967), 13, pp. 247-276.
9. G. E. Backus and J. F. Gilbert, "The Resolving Power of Gross Earth Data," Geophys. J. R. Astr. Soc. (1968), 16, pp. 169-205.
10. D. L. Anderson and C. B. Archambeau, "The Anelasticity of the Earth," J. Geophys. Res. (1964), 69(10), 2071.
11. David D. Jackson and D. L. Anderson, "Physical Mechanisms of Seismic-Wave Attenuation," Reviews of Geophysics and Space Physics, February 1970, 8(1).

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12. P. Lieber and Charles Moore, "Studies Based on a Model of Crust and Mantle," a Progress Report to Geophysics Branch, Office of Naval Research, 1967.
13. N. A. Haskell, "The Viscosity of the Asthenosphere," *Amer. J. Sci.*, 33, pp. 22-28, 1937.
14. F. H. Ho, "On Recoil After Removal of Surface Load Applied to a Layered Half Space," Ph. D. Dissertation, University of California, Berkeley, 1971.
15. P. Lieber and F. H. Ho, "On Recoil After Removal of Surface Load Applied to a Layered Half Space and Admissibility of Very Low Viscosity Maxwellian Layers," a Technical Report submitted to the Air Force Office of Scientific Research, Directorate of Physics and Advanced Research Projects Agency, Arlington, Virginia, July 5, 1971.
16. E. Tryggvason, "Surface Deformation and Crustal Structure in the Myrdalsjokull Area of South Iceland," *JGR*, 78, No. 14, pp. 2488-2497, May, 1973.
17. "Earth's Mantle--Viscosity  $10^{13}$  Poise?," *Nature*, Vol. 244, July 13, 1973.
18. P. Lieber and D. Braslau, "On an Earthquake and Aftershock Mechanism Relating to a Model of the Crust and Mantle," Office of Research Services, University of California, Berkeley, Report No. Nonr-222(87) AM-65-8, October 1965.
19. P. Lieber and David Braslau, "Three-Dimensional Fields Produced by a Volterra Dislocation Imbedded in a Layered Half-Space Analytical Representation of a Seismic Mechanism," Report No. N00014-66-C0057-A03 AM-64-14, Office of Research Services, University of California, Berkeley, December 1965. Published in *Bulletin of the Seismological Society of America*, Volume 58, No. 2, April 1968, pp. 613-628.
20. P. Lieber, "A Principle of Maximum Uniformity Obtained as a Theorem On the Distribution of Internal Forces," Institute of Engineering Research, University of California, Berkeley, Report No. Nonr-222(87) MD-63-8, April 1963. Published in *Israel Journal of Technology*, Vol. 5, No. 3, Jerusalem, 1967, pp. 183-187.
21. P. Lieber, "A Principle of Maximum Uniformity: A Bridge Between Classical Mechanics and Non-Equilibrium Thermodynamics," Vol. 2, Proceedings of Canadian Congress of Applied Mechanics, Fluid Mechanics and Thermodynamics Section 2b, pp. 287-290, Centennial Year 1967.
22. P. Lieber, "Aspects of the Principle of Maximum Uniformity: A New and Fundamental Principle of Mechanics," Proceedings of the 7th Symposium on Naval Hydrodynamics in Rome on August 27, 1968.

23. P. Lieber, "Aspects of Evolution and a Principle of Maximum Uniformity," Towards a Theoretical Biology, Vol. II, Sketches, Edinburgh: University of Edinburgh Press, 1969, International Union of Biological Sciences Symposium edited by C. H. Waddington.
24. P. Lieber, "Categories of Information," Office of Research Services, University of California, Berkeley, Report No. Nonr-222(87) AM-65-13, October 1965. Published in the Honorary Volume dedicated to Markus Reiner, Oxford, England, Pergamon Press, 1968.
25. P. Lieber and K. S. Wan, "A Principle of Minimum Dissipation for Real Fluids," Proceedings of the 9th International Congress of Applied Mechanics, Brussels, Belgium, September 1956.
26. P. Lieber, K. S. Wen and O. Anderson, "A Principle of Virtual Displacements for Real Fluids," Proceedings of the 9th International Congress of Applied Mechanics, Brussels, Belgium, September 1956.
27. P. Lieber, K. S. Wen and A. Attia, "Finite Element Method as an Aspect of the Principle of Maximum Uniformity: New Hydrodynamical Ramifications," Paper to be presented at and published in the Proceedings of the International Symposium on Finite Element Methods in Flow Problems, January 7-11th, 1974, University of Wales, Swansea, United Kingdom.
28. J. F. Evernden, Private Communication.
29. J. Tuzo Wilson, "Moa's Almanac-- 3,000 Years of Killer Earthquakes," Saturday Review, February 19, 1972, pp. 60-64.
30. G. Plafker, "Tectonics of the March 27, 1964 Alaska Earthquake," Geological Survey Professional Paper 543-1, 1969.
31. N. Hast, "The State of Stress in the Upper Part of the Earth's Crust," Tectonophysics, Vol. 8, pp. 169-211, 1969.
32. D. Pines and J. Shaham, "Quadrupolar Analysis of Storage and Release of Elastic Energy in the Earth," Nature Physical Science, Vol. 243, No. 130 pp. 122-127, June 25, 1973.
33. D. Pines and J. Shaham, "Seismic Activity, Polar Tides and Chandler Wobble," Nature, Vol. 245, No. 5420, pp. 77-81, September 14, 1973.
34. E. F. Savarensky, "On the Prediction of Earthquakes," Tectonophysics, 6 (1) 1968, pp. 17-27.



35. Y. P. Aggarwal, L. R. Sykes, J. Armbruster and M. L. Sbar, "Premonitory Changes in Seismic Velocities and Prediction of Earthquakes," *Nature*, 241, Jan. 12, 1973.
36. J. H. Whitcomb, J. D. Garmany and D. L. Anderson, "Earthquake Prediction: Variation of Seismic Velocities before San Fernando Earthquake," *Science*, 180, May 11, 1973.

## TABLES



## FIGURES

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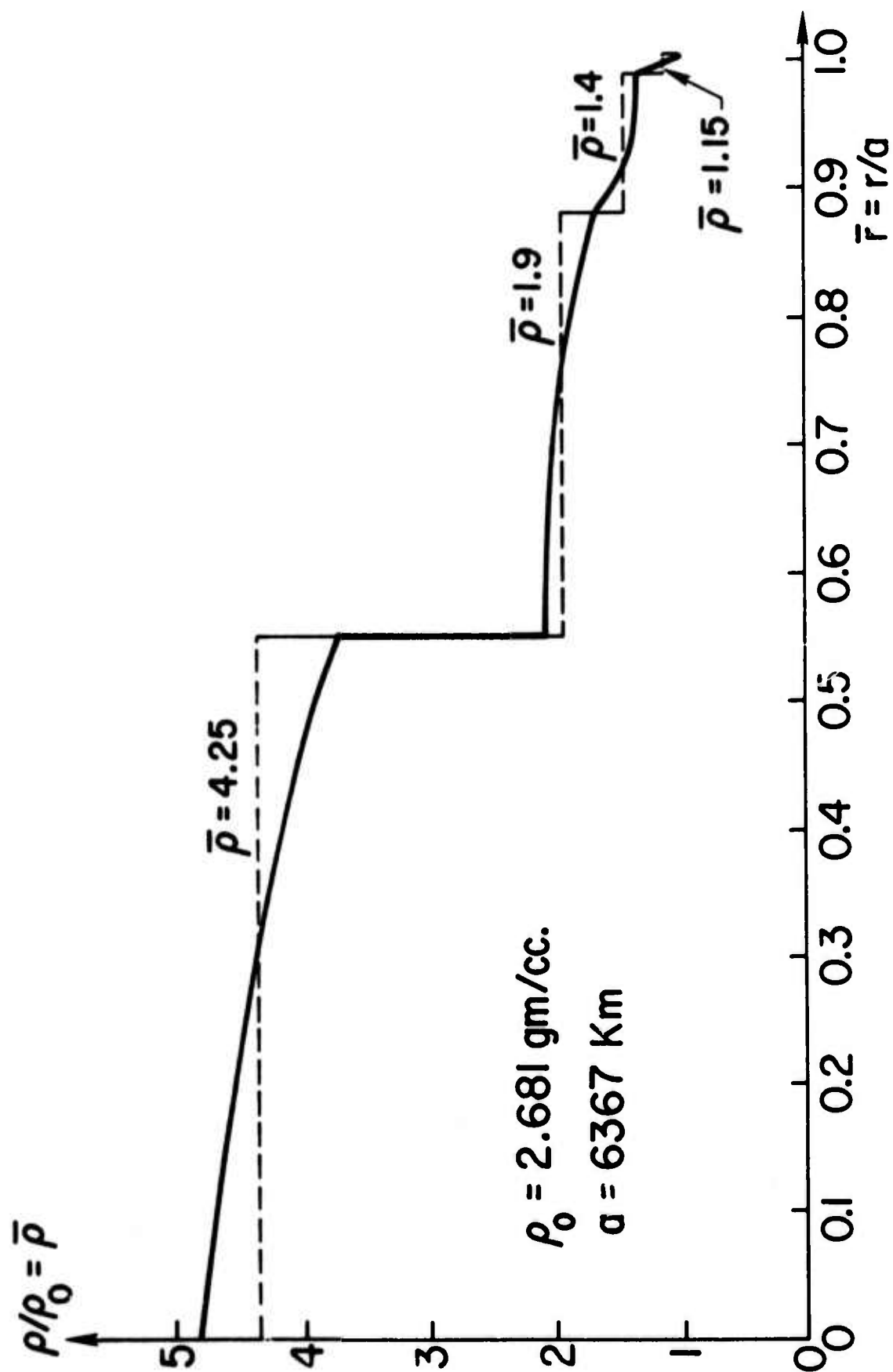


Figure 1. The Distribution of the Density within the Earth

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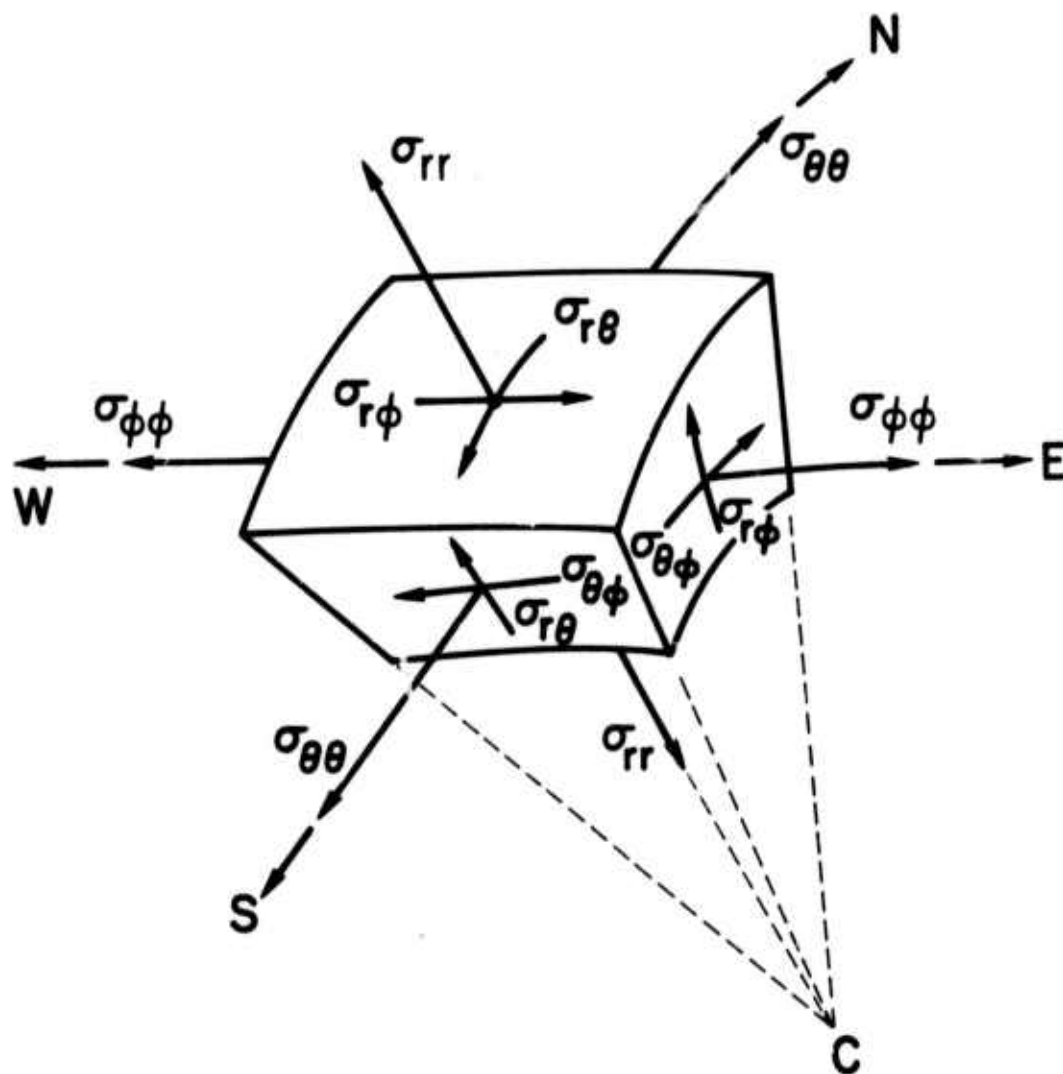


Figure 2. Configuration of the Stress Field in Spherical Coordinate System

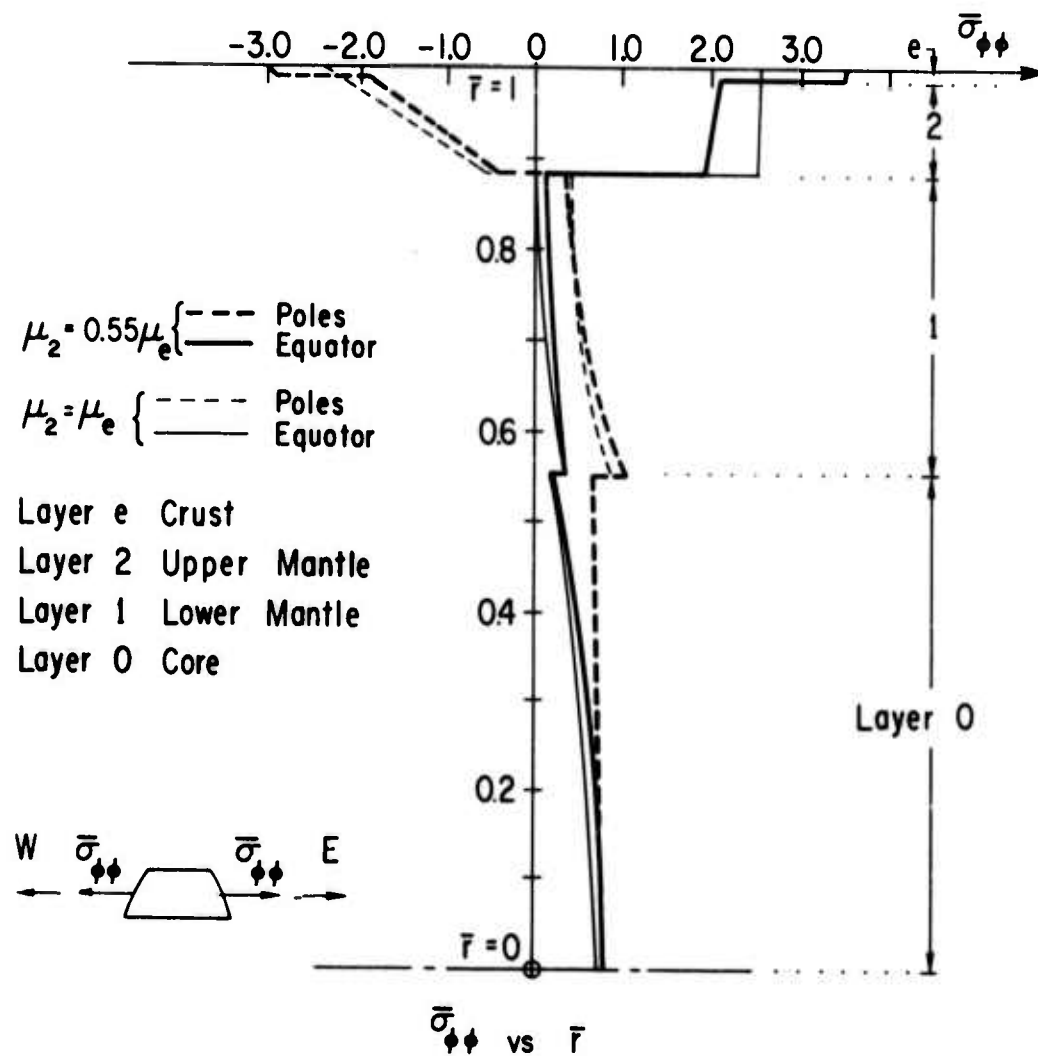


Figure 3. Distributions of the Calculated Primordial Stress Field  $\bar{\sigma}_{\phi\phi}$  with Depth for Different Values of  $\mu_2$

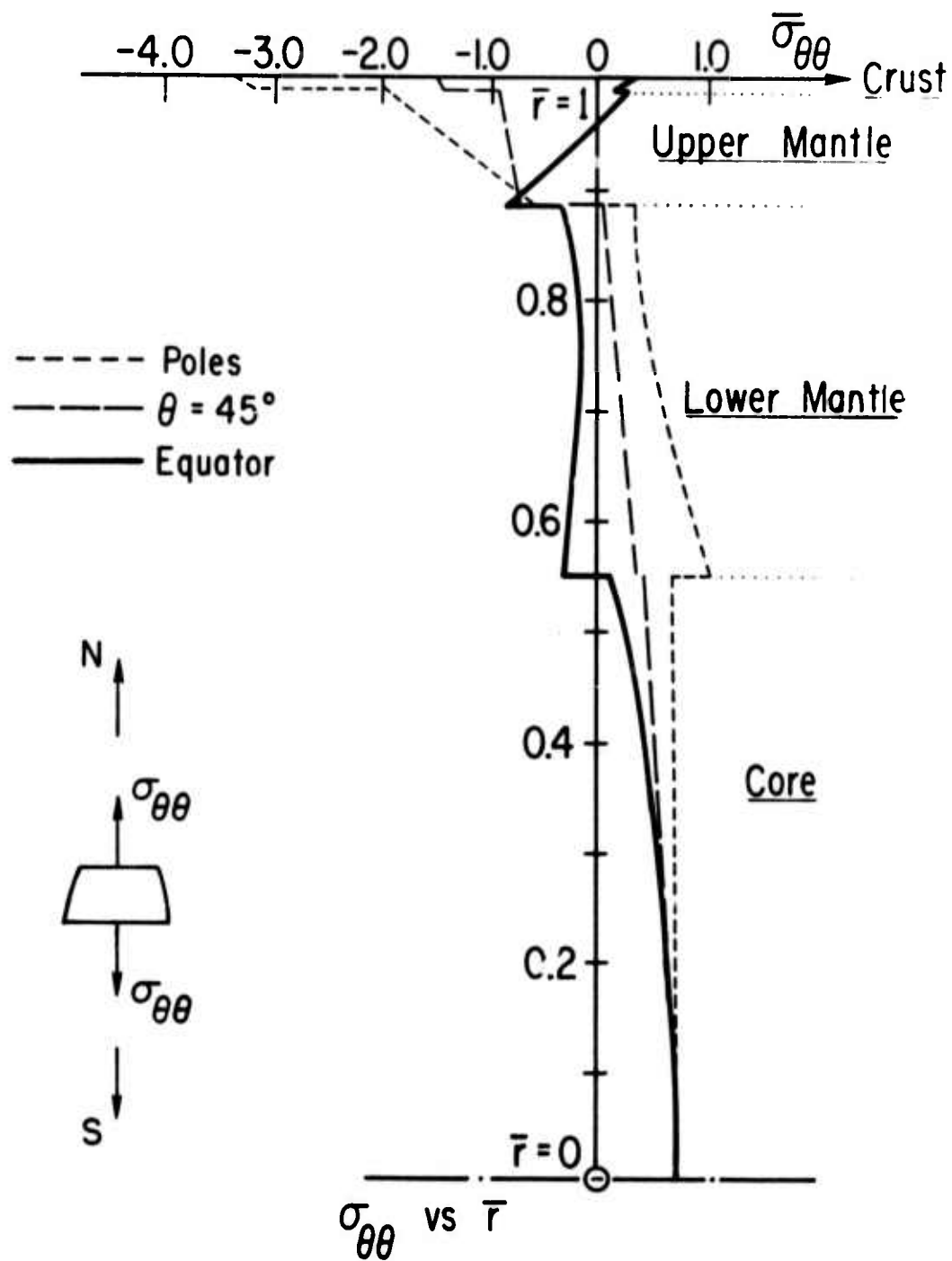


Figure 4. Distributions of the Calculated Primordial Stress Field  $\sigma_{\theta\theta}$  with Depth



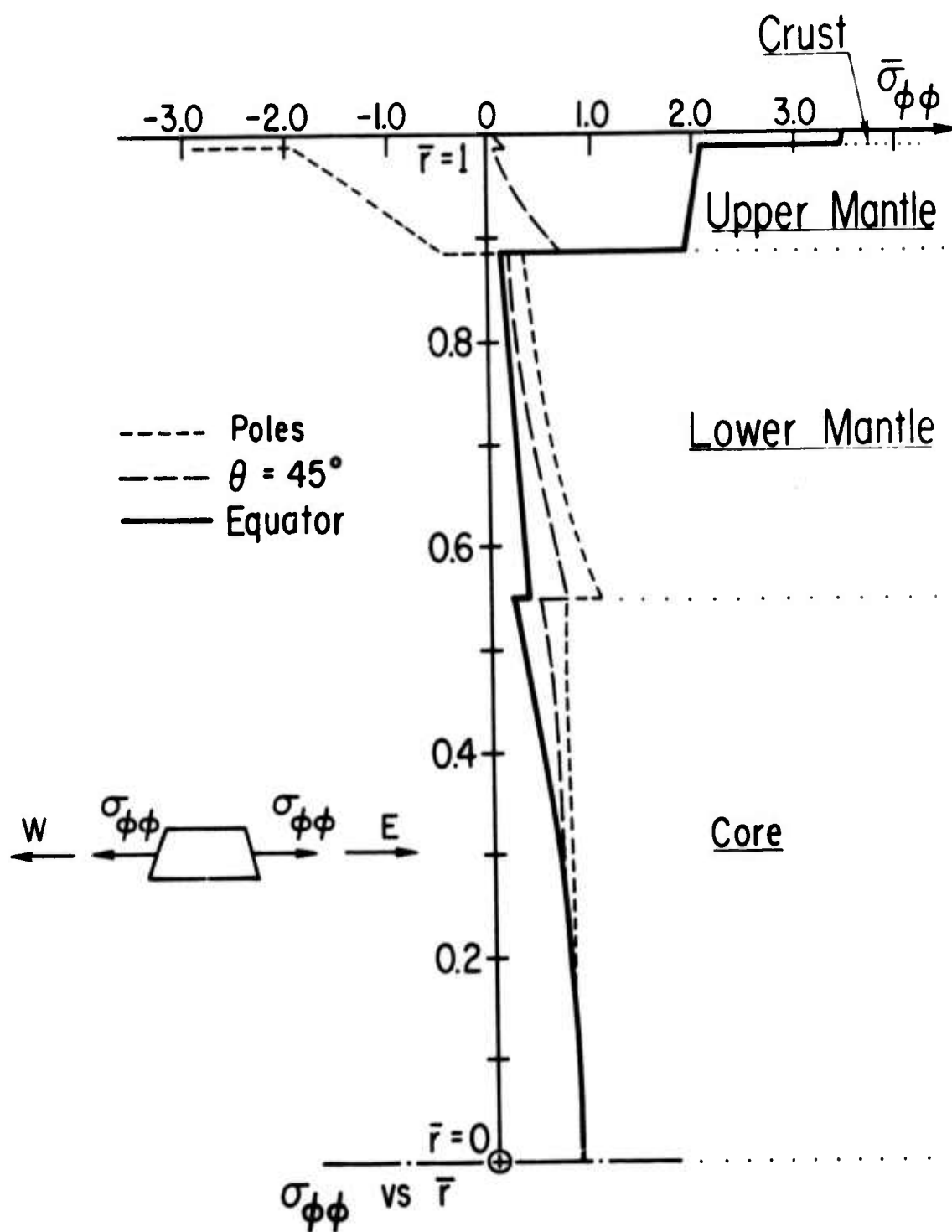


Figure 5. Distributions of the Calculated Primordial Stress Field  $\sigma_{\phi\phi}$  with Depth

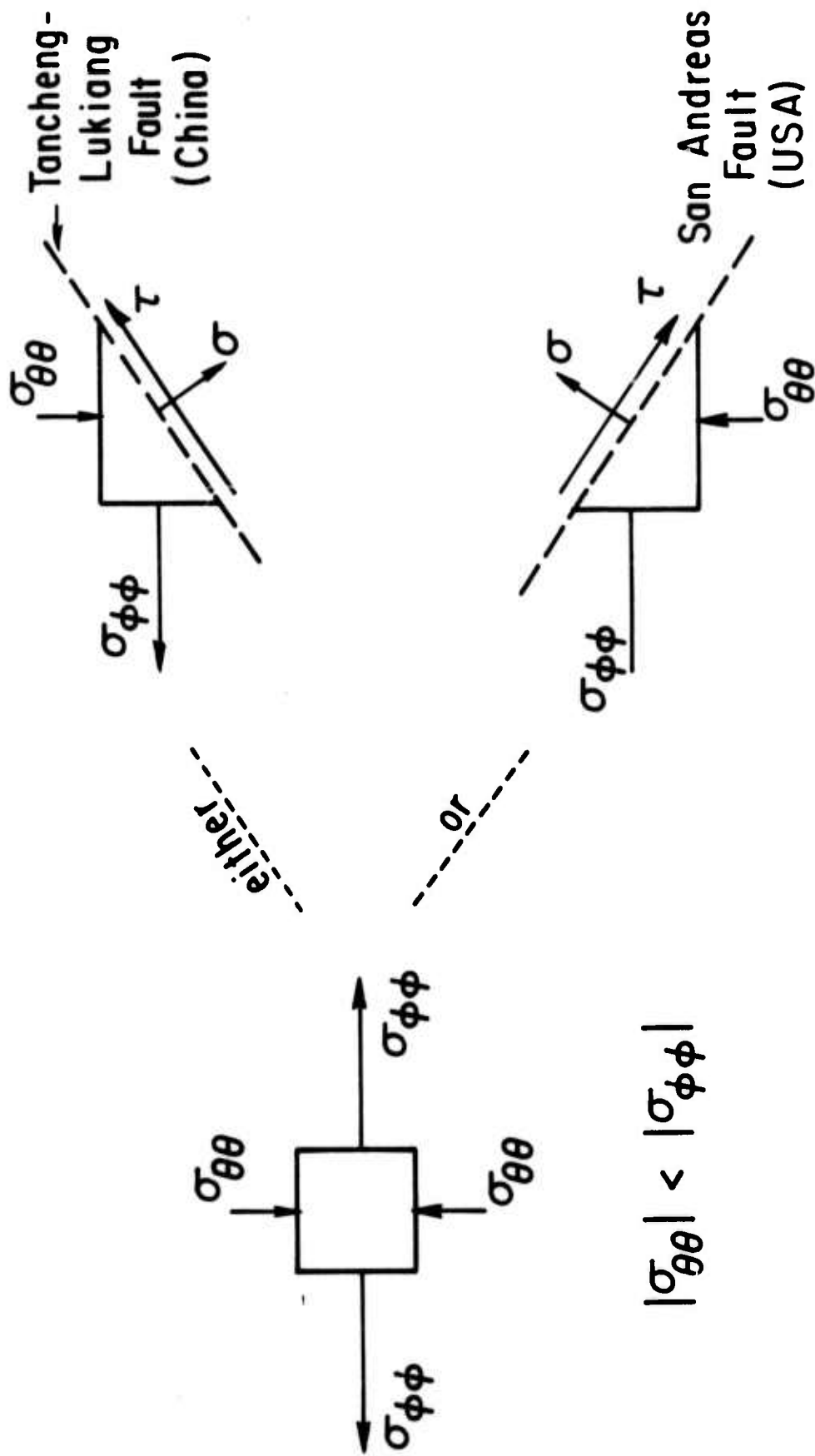


Figure 6. Resolutions of the Calculated Primordial Stress Field Along Major Fault Systems

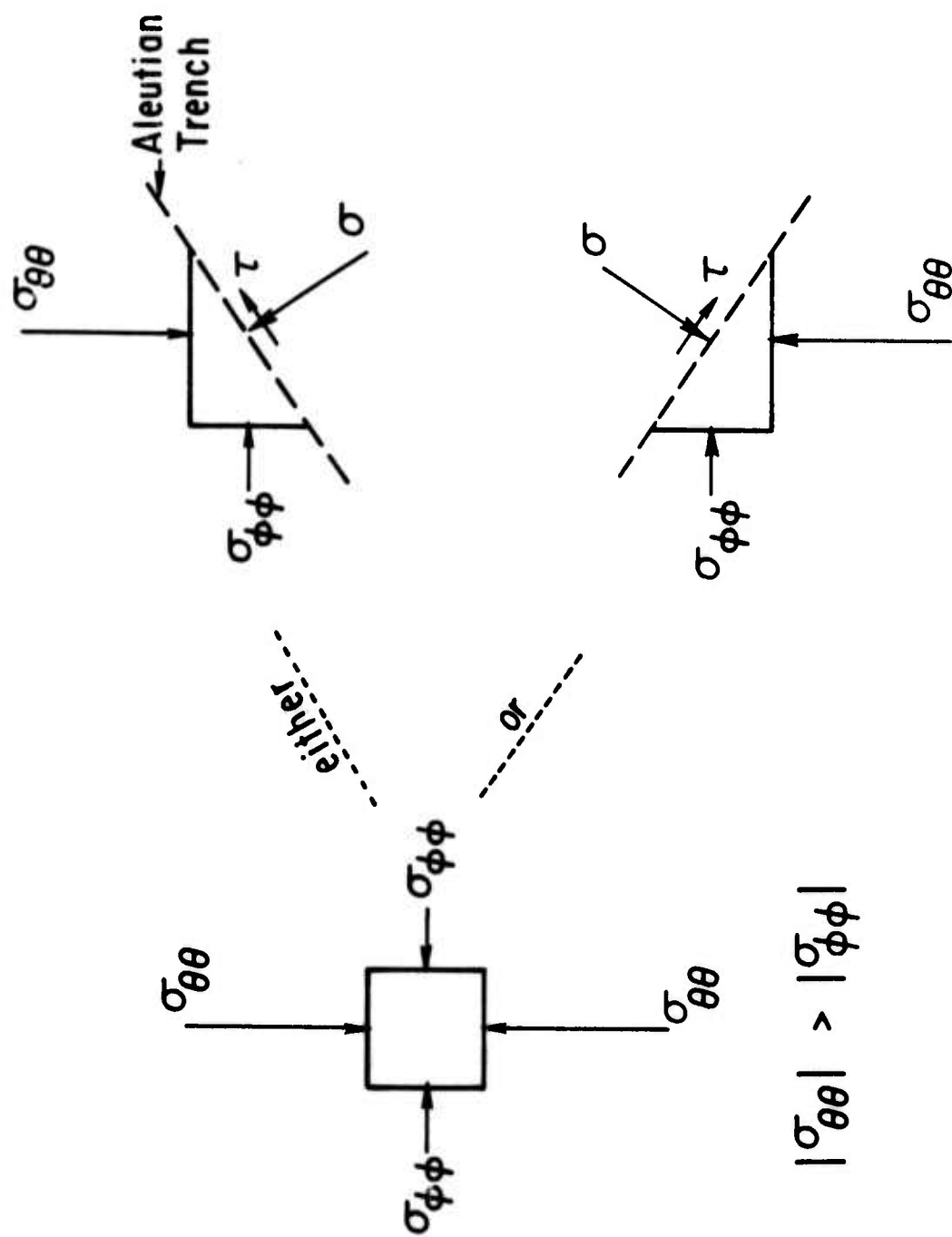


Figure 7. Resolutions of the Calculated Primordial Stress Field Along Major Trenches

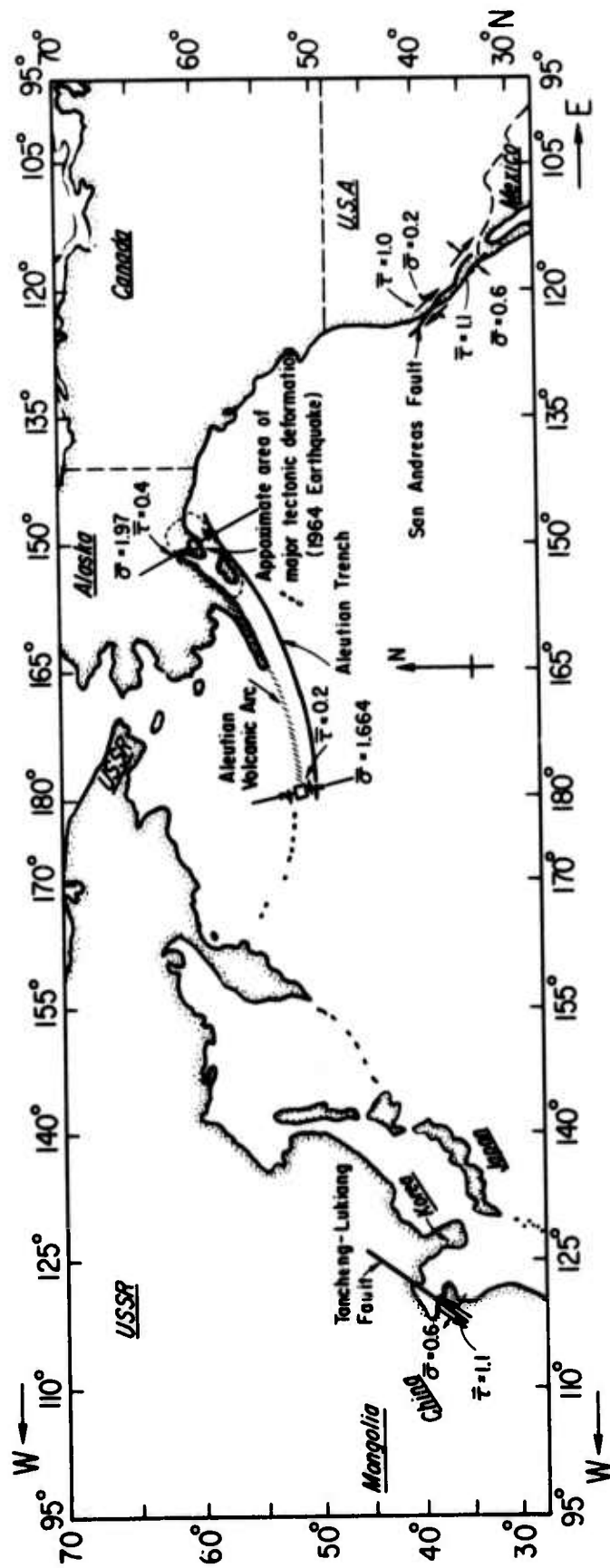


Figure 8. Primordial Stress Field Along Tancheng-Lukiang Fault (China), Aleutian Trench and San Andreas Fault (USA)

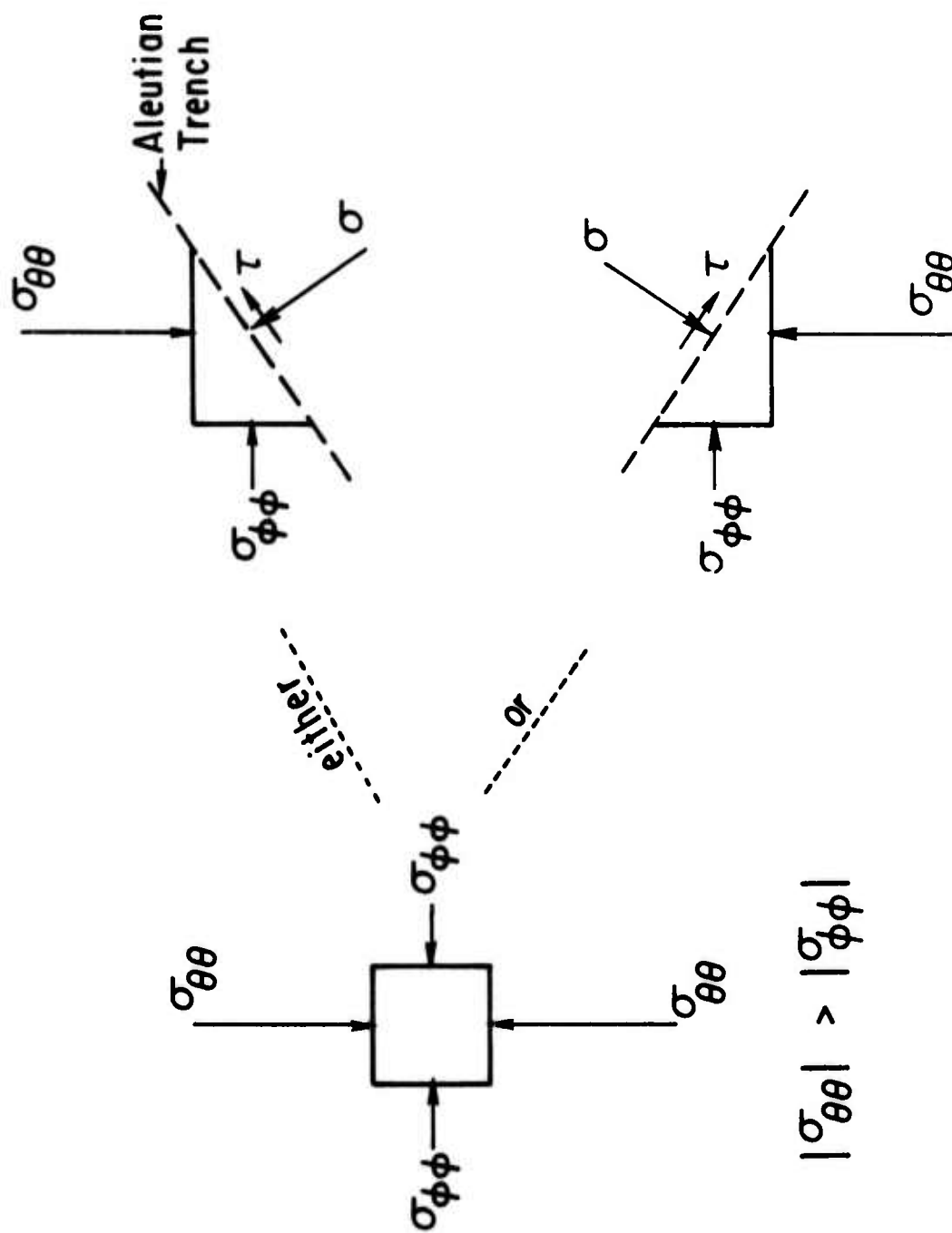


Figure 7. Resolutions of the Calculated Primordial Stress Field Along Major Trenches

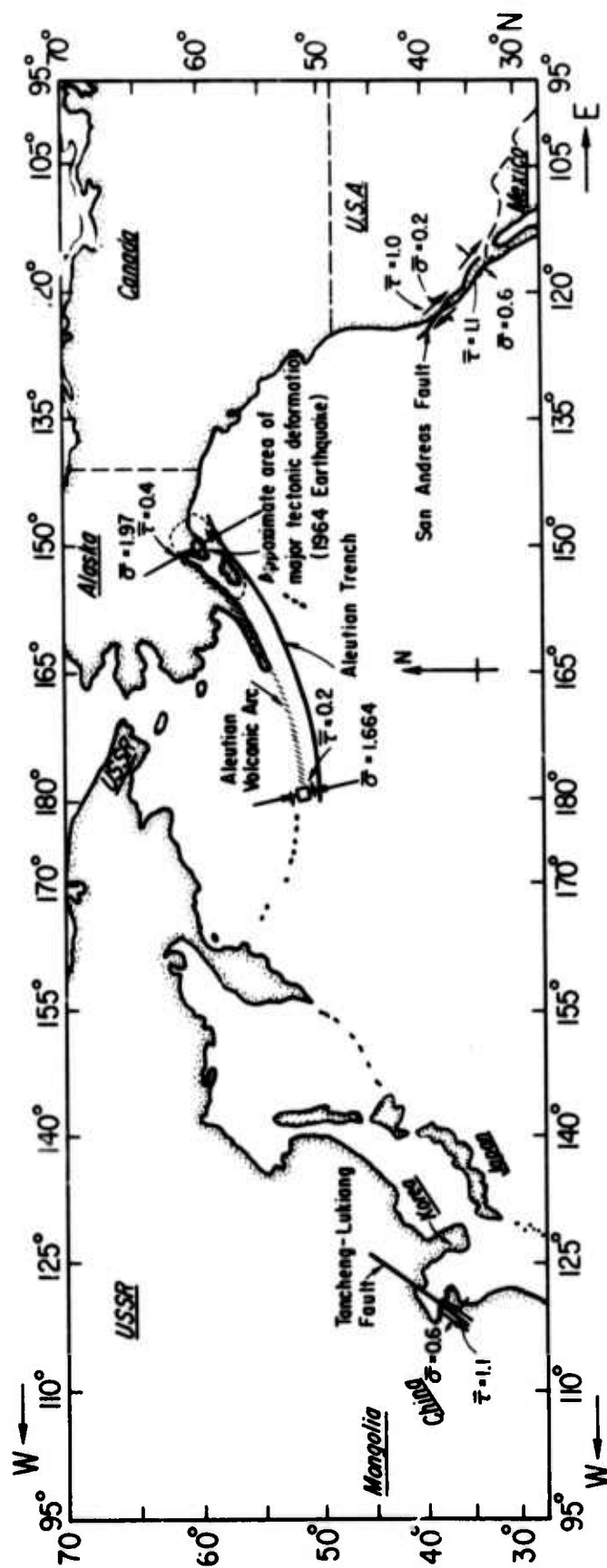


Figure 8. Primordial Stress Field Along Tancheng-Lukiang Fault (China), Aleutian Trench and San Andreas Fault (USA)

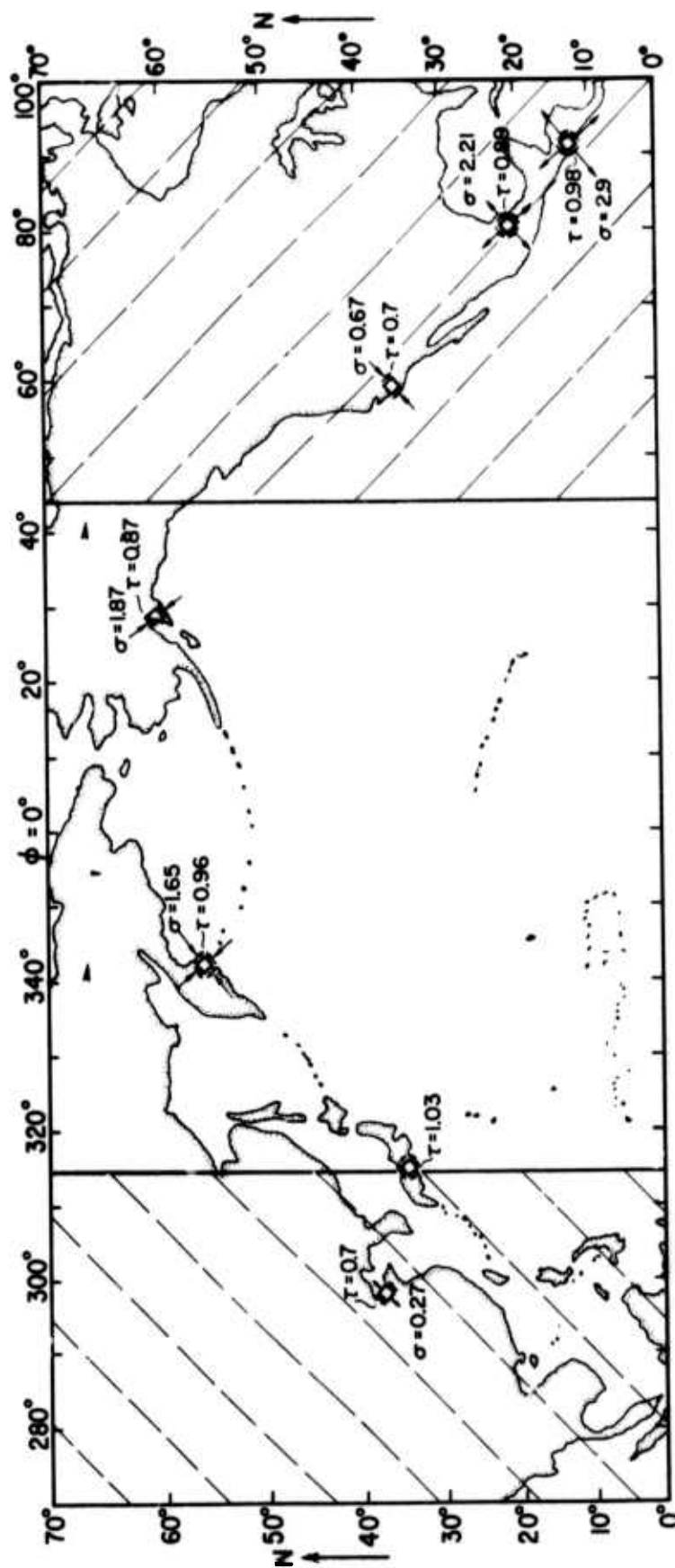


Figure 9. Stress Field in Idealized Oceanic and Continental Model (Set II) (1).

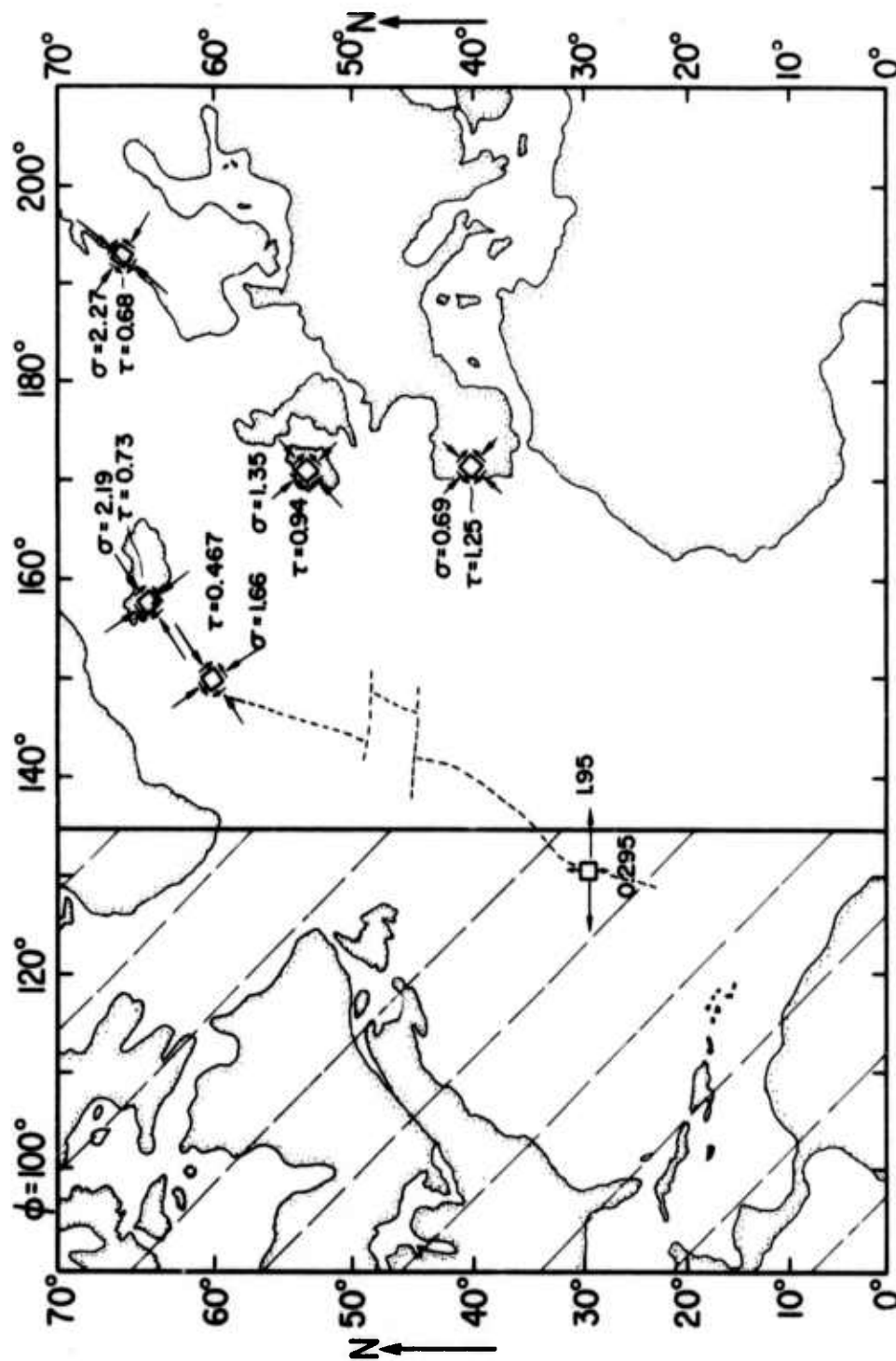


Figure 10. Stress Field in Idealized Oceanic and Continental Model (Set II) (2).



## Appendix A

Numerical Results Obtained for  
Model IV, Set I

# Set I -- Model IV -- Core

THETA = 0. (90°)	RHOBAR	DELTA	USBAR	VBAR (V)	SGR1	SGRF	SGRR	SGTT	SIGRT
0.	.48100E+01	.50553E+00	0.	0.	.75941E+00	.78883E+00	.70057E+00	.78883E+00	0.
.50000E-01	.47743E+01	.50507E+00	-.25573E+00	0.	.75543E+00	.78784E+00	.70047E+00	.78784E+00	0.
.10000E-00	.47255E+01	.50373E+00	-.50617E+00	0.	.74359E+00	.78495E+00	.70020E+00	.78495E+00	0.
.15000E-00	.46637E+01	.50155E+00	-.74639E+00	0.	.72409E+00	.78029E+00	.69973E+00	.78029E+00	0.
.20000E-00	.45889E+01	.49864E+00	-.97133E+00	0.	.69719E+00	.77405E+00	.69906E+00	.77405E+00	0.
.25000E-00	.45009E+01	.49507E+00	-.11790E+01	0.	.66321E+00	.76644E+00	.69818E+00	.76644E+00	0.
.30000E-00	.44000E+01	.49096E+00	-.13645E+01	0.	.62254E+00	.75774E+00	.69708E+00	.75774E+00	0.
.35000E-00	.42860E+01	.48645E+00	-.15244E+01	0.	.57564E+00	.74826E+00	.69573E+00	.74826E+00	0.
.40000E-00	.41589E+01	.48170E+00	-.16636E+01	0.	.52302E+00	.73835E+00	.69412E+00	.73835E+00	0.
.45000E-00	.40188E+01	.47687E+00	-.17762E+01	0.	.46528E+00	.72841E+00	.69223E+00	.72841E+00	0.
.50000E-00	.38656E+01	.47214E+00	-.19658E+01	0.	.40306E+00	.71888E+00	.69001E+00	.71888E+00	0.
.55000E-00	.36994E+01	.46775E+00	-.19351E+01	0.	.33707E+00	.71024E+00	.68745E+00	.71024E+00	0.

THETA = .39270E+00	RHOBAR	DELTA	USBAR	VBAR	SGR1	SGRF	SGRR	SIGRT	SIGRT
0.	.48100E+01	.50553E+00	0.	0.	.75941E+00	.78883E+00	.71349E+00	.77590E+00	.31205E-01
.50000E-01	.47743E+01	.50459E+00	-.19771E+00	.13977E+00	.75543E+00	.78715E+00	.71255E+00	.77430E+00	.30921E-01
.10000E-00	.47255E+01	.50181E+00	-.39132E+00	.27488E+00	.74359E+00	.78219E+00	.70973E+00	.76956E+00	.30096E-01
.15000E-00	.46637E+01	.49727E+00	-.57703E+00	.40106E+00	.72409E+00	.77411E+00	.70508E+00	.76192E+00	.28784E-01
.20000E-00	.45889E+01	.49107E+00	-.75139E+00	.51461E+00	.69719E+00	.76312E+00	.69865E+00	.75129E+00	.27057E-01
.25000E-00	.45009E+01	.48332E+00	-.91145E+00	.51250E+00	.66321E+00	.74946E+00	.68075E+00	.73819E+00	.25006E-01
.30000E-00	.44000E+01	.47418E+00	-.10549E+01	.69301E+00	.62254E+00	.73344E+00	.68075E+00	.72820E+00	.22743E-01
.35000E-00	.42860E+01	.46382E+00	-.11801E+01	.75432E+00	.57564E+00	.71541E+00	.65935E+00	.70550E+00	.20395E-01
.40000E-00	.41589E+01	.45243E+00	-.12862E+01	.79870E+00	.52302E+00	.69579E+00	.65654E+00	.69661E+00	.19110E-01
.45000E-00	.40188E+01	.44023E+00	-.13733E+01	.92615E+00	.46528E+00	.67501E+00	.64237E+00	.66657E+00	.16054E-01
.50000E-00	.38656E+01	.42747E+00	-.14427E+01	.94070E+00	.40306E+00	.65359E+00	.62698E+00	.64586E+00	.14413E-01
.55000E-00	.36994E+01	.41443E+00	-.14957E+01	.94755E+00	.33707E+00	.63207E+00	.61049E+00	.62499E+00	.13390E-01

THETA = .78540E+00	RHOBAR	DELTA	USBAR	VBAR	SGR1	SGRF	SGRR	SIGTT	SIGRT
0.	.48100E+01	.50553E+00	0.	0.	.75941E+00	.78883E+00	.74470E+00	.74470E+00	.44131E-01
.50000E-01	.47743E+01	.50343E+00	-.57632E-01	.19766E+00	.75543E+00	.78548E+00	.74169E+00	.74160E+00	.43729E-01
.10000E-00	.47255E+01	.49720E+00	-.11406E+00	.38874E+00	.74359E+00	.77554E+00	.73274E+00	.73239E+00	.42562E-01
.15000E-00	.46637E+01	.49694E+00	-.15817E+00	.56718E+00	.72409E+00	.75921E+00	.71800E+00	.71724E+00	.40706E-01
.20000E-00	.45889E+01	.47280E+00	-.21895E+00	.72777E+00	.69719E+00	.73674E+00	.69766E+00	.69635E+00	.38264E-01
.25000E-00	.45009E+01	.45498E+00	-.25557E+00	.86634E+00	.66321E+00	.70846E+00	.67195E+00	.67000E+00	.35364E-01
.30000E-00	.44000E+01	.43369E+00	-.30735E+00	.98006E+00	.62254E+00	.67477E+00	.64118E+00	.63851E+00	.32163E-01
.35000E-00	.42860E+01	.40919E+00	-.34388E+00	.10676E+01	.57564E+00	.63612E+00	.60566E+00	.60226E+00	.28842E-01
.40000E-00	.41589E+01	.39178E+00	-.37495E+00	.11295E+01	.52302E+00	.59303E+00	.56584E+00	.56169E+00	.25611E-01
.45000E-00	.40188E+01	.35179E+00	-.40059E+00	.11694E+01	.46528E+00	.54610E+00	.52202E+00	.51728E+00	.22704E-01
.50000E-00	.38656E+01	.31960E+00	-.42152E+00	.11899E+01	.40306E+00	.49596E+00	.47480E+00	.46957E+00	.20383E-01
.55000E-00	.36994E+01	.29562E+00	-.43823E+00	.11996E+01	.33707E+00	.44335E+00	.42467E+00	.41916E+00	.19936E-01

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 .10000E+00 .49258E+00 .16320E+00 .27488E+00 .74359E+00 .76809E+00 .75523E+00 .69523E+00 .30096E-01  
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 .20000E+00 .45454E+00 .31348E+00 .51461E+00 .69719E+00 .71036E+00 .69667E+00 .64140E+00 .27057E-01  
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 .45000E+00 .40188E+01 .10277E+01 .12817E-13 .46528E+00 .36379E+00 .35180E+00 .30615E+00 .24477E-15  
 .50000E+00 .38656E+01 .10327E+01 .12817E-13 .40306E+00 .27305E+00 .25956E+00 .22026E+00 .21974E-15  
 .55000E+00 .36994E+01 .10586E+01 .12922E-13 .33707E+00 .17645E+00 .16188E+00 .12807E+00 .20414E-15

THETA= .19635E+01  
 0. RHOBAR DELTA UBAR VBAR SGRI SGRF SIGR2 SIGTT SIGRT  
 .48100E+01 .50553E+00 0. .13977E+00 .75941E+00 .78003E+00 .77590E+00 .71349E+00 .31205E-01  
 .50000E-01 .50228E+00 .82442E-01 .13977E+00 .75543E+00 .78381E+00 .77084E+00 .70890E+00 .30921E-01  
 .10000E+00 .49258E+00 .16320E+00 .27488E+00 .74359E+00 .76809E+00 .75523E+00 .69523E+00 .30096E-01  
 .15000E+00 .47661E+00 .24069E+00 .40106E+00 .72409E+00 .74430E+00 .73093E+00 .67265E+00 .28784E-01  
 .20000E+00 .45454E+00 .31348E+00 .51461E+00 .69719E+00 .71036E+00 .69667E+00 .64140E+00 .27057E-01  
 .25000E+00 .45809E+01 .39031E+00 .61260E+00 .66321E+00 .66746E+00 .65341E+00 .60180E+00 .25006E-01  
 .30000E+00 .39319E+00 .44017E+00 .69301E+00 .62254E+00 .61610E+00 .60165E+00 .55420E+00 .22743E-01  
 .35000E+00 .35455E+00 .49230E+00 .75492E+00 .57564E+00 .55683E+00 .54197E+00 .49903E+00 .20395E-01  
 .40000E+00 .31112E+00 .53626E+00 .79870E+00 .52302E+00 .49028E+00 .47506E+00 .43677E+00 .19110E-01  
 .45000E+00 .26335E+00 .51196E+00 .82615E+00 .46528E+00 .41719E+00 .40166E+00 .36799E+00 .16054E-01  
 .50000E+00 .21174E+00 .59970E+00 .84070E+00 .40306E+00 .33834E+00 .32262E+00 .29328E+00 .14413E-01  
 .55000E+00 .15684E+00 .62021E+00 .84755E+00 .33707E+00 .25462E+00 .23885E+00 .21333E+00 .13390E-01

# Set I — Model IV — Lower Mantle

THETA	R	$\rho$	$\rho$	DELTA	UBAR	VBAR	$\sigma_{rr}$	$\sigma_{\theta\theta}$	$\sigma_{\phi\phi}$
.55000E+00	.20600E+01	.20600E+01	.54304E+00	-.19350E+01	0.	.33708E+00	SGRF	SIGRR	SIGTT
.60000E+00	.20159E+01	.20159E+01	.47561E+00	-.19653E+01	0.	.30003E+00	.90703E+00	.68746E+00	.90703E+00
.65000E+00	.19638E+01	.19638E+01	.42345E+00	-.19618E+01	0.	.26041E+00	.74952E+00	.69188E+00	.74952E+00
.70000E+00	.19038E+01	.19038E+01	.39133E+00	-.19421E+01	0.	.21864E+00	.64309E+00	.66444E+00	.64309E+00
.75000E+00	.18359E+01	.18359E+01	.34601E+00	-.19142E+01	0.	.17513E+00	.56518E+00	.62622E+00	.56518E+00
.80000E+00	.17601E+01	.17601E+01	.31545E+00	-.19819E+01	0.	.13034E+00	.50382E+00	.58625E+00	.50382E+00
.85000E+00	.16763E+01	.16763E+01	.29830E+00	-.19465E+01	0.	.84737E-01	.45245E+00	.54821E+00	.45245E+00
.90000E+00	.15846E+01	.15846E+01	.26372E+00	-.19096E+01	0.	.38825E-01	.40735E+00	.51337E+00	.40735E+00
.95000E+00	.14850E+01	.14850E+01	.24114E+00	-.17683E+01	0.	-.68578E-02	.36645E+00	.48193E+00	.36645E+00
.10000E+01	.13775E+01	.13775E+01	.22022E+00	-.17254E+01	0.	-.51738E-01	.32859E+00	.45364E+00	.32859E+00

THETA	R	$\rho$	$\rho$	DELTA	UBAR	VBAR	$\sigma_{rr}$	$\sigma_{\theta\theta}$	$\sigma_{\phi\phi}$
.55000E+00	.20600E+01	.20600E+01	.47310E+00	-.14966E+01	.94755E+00	.33708E+00	SGRF	SIGRR	SIGTT
.60000E+00	.20159E+01	.20159E+01	.41515E+00	-.15203E+01	.76517E+00	.30003E+00	.81985E+00	.61050E+00	.74900E+00
.65000E+00	.19638E+01	.19638E+01	.36879E+00	-.15178E+01	.71132E+00	.26041E+00	.68262E+00	.60580E+00	.62388E+00
.70000E+00	.19038E+01	.19038E+01	.32998E+00	-.15024E+01	.67274E+00	.21864E+00	.58673E+00	.57569E+00	.53641E+00
.75000E+00	.18359E+01	.18359E+01	.29625E+00	-.14810E+01	.64173E+00	.17513E+00	.51378E+00	.53669E+00	.46595E+00
.80000E+00	.17601E+01	.17601E+01	.26606E+00	-.14562E+01	.61374E+00	.13034E+00	.45405E+00	.49594E+00	.41471E+00
.85000E+00	.16763E+01	.16763E+01	.23843E+00	-.14292E+01	.58604E+00	.94737E-01	.40224E+00	.45642E+00	.36697E+00
.90000E+00	.15846E+01	.15846E+01	.21276E+00	-.14004E+01	.55708E+00	.36825E-01	.35542E+00	.41921E+00	.32372E+00
.95000E+00	.14850E+01	.14850E+01	.19868E+00	-.13692E+01	.52606E+00	-.68578E-02	.31197E+00	.38459E+00	.28352E+00
.10000E+01	.13775E+01	.13775E+01	.16600E+00	-.13376E+01	.49274E+00	-.51738E-01	.27107E+00	.35249E+00	.24501E+00

THETA	R	$\rho$	$\rho$	DELTA	UBAR	VBAR	$\sigma_{rr}$	$\sigma_{\theta\theta}$	$\sigma_{\phi\phi}$
.55000E+00	.20600E+01	.20600E+01	.30425E+00	-.43921E+00	.11996E+01	.33708E+00	SGRF	SIGRR	SIGTT
.60000E+00	.20159E+01	.20159E+01	.26919E+00	-.44573E+00	.10821E+01	.30003E+00	.60939E+00	.42468E+00	.36749E+00
.65000E+00	.19638E+01	.19638E+01	.23693E+00	-.44513E+00	.10060E+01	.26041E+00	.52112E+00	.39799E+00	.32092E+00
.70000E+00	.19038E+01	.19038E+01	.20602E+00	-.44093E+00	.95139E+00	.21864E+00	.45066E+00	.36142E+00	.27888E+00
.75000E+00	.18359E+01	.18359E+01	.17613E+00	-.43494E+00	.90754E+00	.17513E+00	.34968E+00	.32053E+00	.23882E+00
.80000E+00	.17601E+01	.17601E+01	.14694E+00	-.42944E+00	.86795E+00	.13034E+00	.33388E+00	.27791E+00	.19956E+00
.85000E+00	.16763E+01	.16763E+01	.11904E+00	-.42172E+00	.82879E+00	.94737E-01	.24103E+00	.23481E+00	.16060E+00
.90000E+00	.15846E+01	.15846E+01	.89728E-01	-.41493E+00	.78793E+00	.18825E-01	.23004E+00	.19129E+00	.12191E+00
.95000E+00	.14850E+01	.14850E+01	.62028E-01	-.40807E+00	.74396E+00	-.68578E-02	.14045E+00	.14960E+00	.83233E-01
.10000E+01	.13775E+01	.13775E+01	.35117E-01	-.40111E+00	.69684E+00	-.51738E-01	.13219E+00	.10827E+00	.45269E-01

THETA=	R	DELTA	JBAR	VBAR	SGRI	SGRF	SIGRR	SIGTT	SIGRT
.55000E+00	.11791E+01	.13541E+00	.62019E+00	.94755E+00	.33708E+00	.39892E+00	.23886E+00	-.14031E-01	.13387E-01
.60000E+00	.20600E+01	.12323E+00	.62874E+00	.76517E+00	.30003E+00	.35961E+00	.19019E+00	.17865E-01	.55574E-01
.65000E+00	.20159E+01	.10487E+00	.62736E+00	.71132E+00	.26041E+00	.31460E+00	.14715E+00	.21340E-01	.72927E-01
.70000E+00	.19638E+01	.82062E-01	.62075E+00	.67274E+00	.21864E+00	.26559E+00	.10438E+00	.80494E-02	.77444E-01
.75000E+00	.19038E+01	.55010E-01	.61107E+00	.64173E+00	.17513E+00	.21371E+00	.59882E-01	-.15583E-01	.75218E-01
.80000E+00	.18359E+01	.27624E-01	.59928E+00	.61374E+00	.13034E+00	.15982E+00	.13200E-01	-.45768E-01	.69488E-01
.85000E+00	.17601E+01	-.23605E-02	.58574E+00	.58604E+00	.84737E-01	.10465E+00	.35420E-01	-.80107E-01	.62059E-01
.90000E+00	.16763E+01	-.33305E-01	.57057E+00	.55704E+00	.38825E-01	.48922E-01	-.85390E-01	-.11695E-01	.53991E-01
.95000E+00	.15846E+01	-.64626E-01	.55377E+00	.52606E+00	-.68578E-02	-.66786E-02	-.13595E+00	-.15507E+00	.45946E-01
.10000E+01	.14850E+01	-.95768E-01	.53533E+00	.49274E+00	-.51738E-01	-.61431E-01	-.18625E+00	-.19347E+00	.38375E-01

THETA=	R	DELTA	JBAR	VBAR	SGRI	SGRF	SIGRR	SIGTT	SIGRT
.55000E+00	.15708E+01	.65466E-01	.10596E+01	.12922E-13	.33708E+00	.31174E+00	.16189E+00	-.17206E+00	.20410E-15
.60000E+00	.20600E+01	.62772E-01	.10738E+01	.11666E-13	.30003E+00	.29727E+00	.10411E+00	-.10767E+00	.84728E-15
.65000E+00	.20159E+01	.50212E-01	.10716E+01	.10845E-13	.26041E+00	.25824E+00	.58400E-01	-.85336E-01	.11118E-14
.70000E+00	.19638E+01	.30716E-01	.10605E+01	.10257E-13	.21864E+00	.21419E+00	.14845E-01	-.87539E-01	.11807E-14
.75000E+00	.19038E+01	.62535E-02	.10443E+01	.97839E-14	.17513E+00	.14393E+00	-.30429E-01	-.10470E+00	.11468E-14
.80000E+00	.18359E+01	-.21759E-01	.10250E+01	.93571E-14	.13034E+00	.10961E+00	-.78593E-01	-.13125E+00	.10594E-14
.85000E+00	.17601E+01	-.52231E-01	.10030E+01	.99348E-14	.84737E-01	.52718E-01	-.12958E+00	-.16374E+00	.94616E-15
.90000E+00	.16763E+01	-.84267E-01	.97877E+00	.94932E-14	.38825E-01	-.55582E-02	-.18273E+00	-.19999E+00	.82314E-15
.95000E+00	.15846E+01	-.11709E+00	.95217E+00	.90203E-14	-.68578E-02	-.64202E-01	-.23711E+00	-.23805E+00	.70050E-15
.10000E+01	.14850E+01	-.14998E+00	.92322E+00	.75124E-14	-.51738E-01	-.12227E+00	-.29165E+00	-.27697E+00	.58508E-15

THETA=	R	DELTA	JBAR	VBAR	SGRI	SGRF	SIGRR	SIGTT	SIGRT
.55000E+00	.19635E+01	.13541E+00	.62019E+00	.94755E+00	.33708E+00	.39892E+00	.23886E+00	-.14031E-01	-.13387E-01
.60000E+00	.20600E+01	.12323E+00	.62874E+00	.76517E+00	.30003E+00	.35961E+00	.19019E+00	.17865E-01	-.55574E-01
.65000E+00	.20159E+01	.10487E+00	.62736E+00	.71132E+00	.26041E+00	.31460E+00	.14715E+00	.21340E-01	-.72927E-01
.70000E+00	.19638E+01	.82062E-01	.62075E+00	.67274E+00	.21864E+00	.26559E+00	.10438E+00	.80494E-02	-.77444E-01
.75000E+00	.19038E+01	.55010E-01	.61107E+00	.64173E+00	.17513E+00	.21371E+00	.59882E-01	-.15583E-01	-.75218E-01
.80000E+00	.18359E+01	.27624E-01	.59928E+00	.61374E+00	.13034E+00	.15982E+00	.13200E-01	-.45768E-01	-.69488E-01
.85000E+00	.17601E+01	-.23605E-02	.58574E+00	.58604E+00	.84737E-01	.10465E+00	.35420E-01	-.80107E-01	-.62059E-01
.90000E+00	.16763E+01	-.33305E-01	.57057E+00	.55704E+00	.38825E-01	.48922E-01	-.85390E-01	-.11695E+00	-.53991E-01
.95000E+00	.15846E+01	-.64626E-01	.55377E+00	.52606E+00	-.68578E-02	-.66786E-02	-.13595E+00	-.15507E+00	-.45946E-01
.10000E+01	.14850E+01	-.95768E-01	.53533E+00	.49274E+00	-.51738E-01	-.61431E-01	-.18625E+00	-.19347E+00	-.38375E-01

THETA=	R	RHOBAR	DELTA	JBAR	VBAR	SGR1	SGRF	SIG2R	SIG1T	SIGRT
.78540E+00	.89000E+00	.16456E+01	.32920E-01	-.41728E+00	.91140E+00	.55254E-01	.94512E+00	.15788E+00	-.89896E+00	.66136E-01
	.89000E+00	.15597E+01	.15507E-01	-.41555E+00	.78947E+00	.49942E-01	.84255E+00	.15627E+00	-.91153E+00	.81386E-01
	.89000E+00	.14847E+01	.41589E-03	-.41596E+00	.76775E+00	.49388E-01	.78237E+00	.14407E+00	-.92374E+00	.91955E-01
	.89000E+00	.14206E+01	-.15373E-01	-.41522E+00	.74619E+00	.40185E-01	.70436E+00	.13134E+00	-.93563E+00	.98177E-01
	.89000E+00	.13674E+01	-.30888E-01	-.41442E+00	.72476E+00	.35627E-01	.62833E+00	.11815E+00	-.94724E+00	.10035E+00
	.89000E+00	.13251E+01	-.45156E-01	-.41357E+00	.70343E+00	.31205E-01	.55410E+00	.10453E+00	-.95864E+00	.98756E-01
	.89000E+00	.12937E+01	-.61205E-01	-.41258E+00	.68214E+00	.26858E-01	.48151E+00	.90514E-01	-.96986E+00	.93625E-01
	.89000E+00	.12732E+01	-.75052E-01	-.41175E+00	.66089E+00	.22526E-01	.41040E+00	.76137E-01	-.98094E+00	.85179E-01
	.89000E+00	.12636E+01	-.90754E-01	-.41078E+00	.63952E+00	.18144E-01	.34061E+00	.61412E-01	-.99193E+00	.73611E-01
	.89000E+00	.12648E+01	-.10531E+00	-.40978E+00	.61832E+00	.13649E-01	.27201E+00	.46347E-01	-.10029E+01	.59094E-01
	.89000E+00	.12770E+01	-.11975E+00	-.40874E+00	.59695E+00	.89735E-02	.20447E+00	.30944E-01	-.10138E+01	.41782E-01
	.89000E+00	.13000E+01	-.13411E+00	-.40757E+00	.57548E+00	.40499E-02	.13785E+00	.15194E-01	-.10247E+01	.21811E-01



THETA= .11781E+01

R	RHOBAR	DELTA	UBAR	VBAR	SGRI	SGRF	SIGRR	SIGTT	SIGRT
.88000E+00	.16456E+01	.13693E+00	.57598E+00	.57374E+00	.55254E-01	.20546E+01	--.71035E-01	--.10935E+01	.46766E-01
.89000E+00	.15597E+01	.14962E+00	.57456E+00	.55824E+00	.49942E-01	.20352E+01	--.69289E-01	--.99336E+00	.57549E-01
.90000E+00	.14847E+01	.16216E+00	.57305E+00	.54288E+00	.44938E-01	.20164E+01	--.68223E-01	--.89611E+00	.65022E-01
.91000E+00	.14206E+01	.17456E+00	.57147E+00	.52764E+00	.40185E-01	.19981E+01	--.62033E-01	--.80148E+00	.69421E-01
.92000E+00	.13674E+01	.18681E+00	.56991E+00	.51249E+00	.35627E-01	.19804E+01	--.56904E-01	--.70927E+00	.70961E-01
.93000E+00	.13251E+01	.19890E+00	.56810E+00	.49740E+00	.31205E-01	.19631E+01	--.51012E-01	--.61928E+00	.67831E-01
.94000E+00	.12937E+01	.21093E+00	.56632E+00	.48235E+00	.26858E-01	.19463E+01	--.44521E-01	--.53136E+00	.66203E-01
.95000E+00	.12732E+01	.22259E+00	.56449E+00	.46732E+00	.22526E-01	.19298E+01	--.37590E-01	--.44536E+00	.60231E-01
.96000E+00	.12636E+01	.23418E+00	.56261E+00	.45228E+00	.18144E-01	.19137E+01	--.30373E-01	--.36113E+00	.52051E-01
.97000E+00	.12648E+01	.24557E+00	.56067E+00	.43722E+00	.13649E-01	.18978E+01	--.23016E-01	--.27857E+00	.41786E-01
.98000E+00	.12770E+01	.25676E+00	.55869E+00	.42210E+00	.89735E-02	.18822E+01	--.15663E-01	--.19754E+00	.29544E-01
.99000E+00	.13000E+01	.26773E+00	.55667E+00	.40693E+00	.40499E-02	.18667E+01	--.84505E-02	--.11797E+00	.15422E-01

THETA= .15708E+01

R	RHOBAR	DELTA	UBAR	VBAR	SGRI	SGRF	SIGRR	SIGTT	SIGRT
.88000E+00	.16456E+01	.18002E+00	.93741E+00	.87473E-14	.55254E-01	.25141E+01	--.17000E+00	--.11740E+01	.71299E-15
.89000E+00	.15597E+01	.20476E+00	.98513E+00	.95110E-14	.49942E-01	.25209E+01	--.16272E+00	--.10273E+01	.87739E-15
.90000E+00	.14847E+01	.22916E+00	.99271E+00	.82768E-14	.44938E-01	.25275E+01	--.15333E+00	--.88467E+00	.99133E-15
.91000E+00	.14206E+01	.25323E+00	.99016E+00	.80444E-14	.40185E-01	.25341E+01	--.14213E+00	--.74592E+00	.10584E-14
.92000E+00	.13674E+01	.27698E+00	.97750E+00	.78134E-14	.35627E-01	.25405E+01	--.12941E+00	--.61069E+00	.10819E-14
.93000E+00	.13251E+01	.30040E+00	.97472E+00	.75834E-14	.31205E-01	.25468E+01	--.11544E+00	--.47872E+00	.10646E-14
.94000E+00	.12937E+01	.32351E+00	.97184E+00	.73539E-14	.26858E-01	.25530E+01	--.10045E+00	--.34973E+00	.10093E-14
.95000E+00	.12732E+01	.34630E+00	.96886E+00	.71247E-14	.22526E-01	.25592E+01	--.84698E-01	--.22352E+00	.91828E-15
.96000E+00	.12636E+01	.36877E+00	.96580E+00	.68955E-14	.18144E-01	.25652E+01	--.68392E-01	--.99851E+01	.79357E-15
.97000E+00	.12648E+01	.39091E+00	.96265E+00	.66658E-14	.13649E-01	.25712E+01	--.51748E-01	--.21449E+01	.63707E-15
.98000E+00	.12770E+01	.41272E+00	.95942E+00	.64354E-14	.89735E-02	.25771E+01	--.34968E-01	--.14056E+00	.45043E-15
.99000E+00	.13000E+01	.43418E+00	.95611E+00	.62040E-14	.40499E-02	.25828E+01	--.18246E-01	--.25763E+00	.23513E-15

THETA= .19635E+01

R	RHOBAR	DELTA	UBAR	VBAR	SGRI	SGRF	SIGRR	SIGTT	SIGRT
.88000E+00	.16456E+01	.13693E+00	.57598E+00	--.57374E+00	.55254E-01	.20546E+01	--.71035E-01	--.10935E+01	--.46766E-01
.89000E+00	.15597E+01	.14962E+00	.57456E+00	--.55824E+00	.49942E-01	.20352E+01	--.69289E-01	--.99336E+00	--.57549E-01
.90000E+00	.14847E+01	.16216E+00	.57305E+00	--.54288E+00	.44938E-01	.20164E+01	--.68223E-01	--.89611E+00	--.65022E-01
.91000E+00	.14206E+01	.17456E+00	.57147E+00	--.52764E+00	.40185E-01	.19981E+01	--.62033E-01	--.80148E+00	--.69421E-01
.92000E+00	.13674E+01	.18681E+00	.56991E+00	--.51249E+00	.35627E-01	.19804E+01	--.56904E-01	--.70927E+00	--.70961E-01
.93000E+00	.13251E+01	.19890E+00	.56810E+00	--.49740E+00	.31205E-01	.19631E+01	--.51012E-01	--.61928E+00	--.67831E-01
.94000E+00	.12937E+01	.21093E+00	.56632E+00	--.48235E+00	.26858E-01	.19463E+01	--.44521E-01	--.53136E+00	--.66203E-01
.95000E+00	.12732E+01	.22259E+00	.56449E+00	--.46732E+00	.22526E-01	.19298E+01	--.37590E-01	--.44536E+00	--.60231E-01
.96000E+00	.12636E+01	.23418E+00	.56261E+00	--.45228E+00	.18144E-01	.19137E+01	--.30373E-01	--.36113E+00	--.52051E-01
.97000E+00	.12648E+01	.24557E+00	.56067E+00	--.43722E+00	.13649E-01	.18978E+01	--.23016E-01	--.27857E+00	--.41786E-01
.98000E+00	.12770E+01	.25676E+00	.55869E+00	--.42210E+00	.89735E-02	.18822E+01	--.15663E-01	--.19754E+00	--.29544E-01
.99000E+00	.13000E+01	.26773E+00	.55667E+00	--.40693E+00	.40499E-02	.18667E+01	--.84505E-02	--.11797E+00	--.15422E-01

# Set I -- Model IV -- Crust

THEIA R (P)	RHOBAR (P)	DELTA (P)	JBAR (P)	YEAR (P)	SGR1	SGRF	( $\sigma_{\theta}$ )	SGRR	( $\sigma_{\theta}$ )	SGRT	( $\sigma_{\theta}$ )
.99000E+00	.13000E+01	-.70247E+00	-.17714E+01	0.	.41498E-02	-.23074E+01	.48791E-01	-.23074E+01	.48791E-01	-.23074E+01	0.
.99100E+00	.12700E+01	-.70746E+00	-.17708E+01	0.	.36519E-02	-.23212E+01	.43941E-01	-.23212E+01	.43941E-01	-.23212E+01	0.
.99200E+00	.12400E+01	-.71245E+00	-.17703E+01	0.	.31726E-02	-.23350E+01	.39087E-01	-.23350E+01	.39087E-01	-.23350E+01	0.
.99300E+00	.12100E+01	-.71743E+00	-.17697E+01	0.	.27118E-02	-.23488E+01	.34228E-01	-.23488E+01	.34228E-01	-.23488E+01	0.
.99400E+00	.11800E+01	-.72241E+00	-.17692E+01	0.	.22696E-02	-.23625E+01	.29365E-01	-.23625E+01	.29365E-01	-.23625E+01	0.
.99500E+00	.11500E+01	-.72738E+00	-.17686E+01	0.	.18460E-02	-.23762E+01	.24498E-01	-.23762E+01	.24498E-01	-.23762E+01	0.
.99600E+00	.11200E+01	-.73235E+00	-.17681E+01	0.	.14410E-02	-.23899E+01	.19626E-01	-.23899E+01	.19626E-01	-.23899E+01	0.
.99700E+00	.10900E+01	-.73731E+00	-.17675E+01	0.	.10546E-02	-.24036E+01	.14751E-01	-.24036E+01	.14751E-01	-.24036E+01	0.
.99800E+00	.10600E+01	-.74227E+00	-.17669E+01	0.	.8692E-03	-.24173E+01	.98711E-02	-.24173E+01	.98711E-02	-.24173E+01	0.
.99900E+00	.10300E+01	-.74723E+00	-.17664E+01	0.	.33786E-03	-.24310E+01	.49876E-02	-.24310E+01	.49876E-02	-.24310E+01	0.
.10000E+01	.10000E+01	-.75218E+00	-.17658E+01	0.	.74921E-05	-.24446E+01	.10022E-03	-.24446E+01	.10022E-03	-.24446E+01	0.

THEIA R	RHOBAR	DELTA	JBAR	YEAR	SGR1	SGRF	SGRR	SGRT	SGRT
.99000E+00	.13000E+01	-.53600E+00	-.13720E+01	.40687E+00	.41498E-02	-.15913E+01	.38985E-01	-.19317E+01	.15309E-01
.99100E+00	.12700E+01	-.53995E+00	-.13715E+01	.40534E+00	.36519E-02	-.16029E+01	.35091E-01	-.19418E+01	.13802E-01
.99200E+00	.12400E+01	-.54389E+00	-.13711E+01	.40392E+00	.31726E-02	-.16146E+01	.31198E-01	-.19519E+01	.12289E-01
.99300E+00	.12100E+01	-.54783E+00	-.13707E+01	.40230E+00	.27118E-02	-.16263E+01	.27305E-01	-.19619E+01	.10770E-01
.99400E+00	.11800E+01	-.55176E+00	-.13703E+01	.40077E+00	.22696E-02	-.16379E+01	.23413E-01	-.19719E+01	.9242E-02
.99500E+00	.11500E+01	-.55569E+00	-.13698E+01	.39925E+00	.18460E-02	-.16496E+01	.19522E-01	-.19820E+01	.77126E-02
.99600E+00	.11200E+01	-.55962E+00	-.13694E+01	.39772E+00	.14410E-02	-.16612E+01	.15632E-01	-.19920E+01	.61751E-02
.99700E+00	.10900E+01	-.56355E+00	-.13690E+01	.39619E+00	.10546E-02	-.16728E+01	.11742E-01	-.20020E+01	.46317E-02
.99800E+00	.10600E+01	-.56748E+00	-.13686E+01	.39466E+00	.8692E-03	-.16843E+01	.78536E-02	-.20119E+01	.30825E-02
.99900E+00	.10300E+01	-.57136E+00	-.13681E+01	.39314E+00	.33786E-03	-.16959E+01	.39662E-02	-.20219E+01	.15276E-02
.10000E+01	.10000E+01	-.57526E+00	-.13677E+01	.39160E+00	.74921E-05	-.17074E+01	.79854E-04	-.20319E+01	-.32844E-04

THEIA R	RHOBAR	DELTA	JBAR	YEAR	SGR1	SGRF	SGRR	SGRT	SGRT
.99000E+00	.13000E+01	-.13410E+00	-.40765E+00	.57548E+00	.41498E-02	.13774E+00	.15319E-01	-.10247E+01	.21650E-01
.99100E+00	.12700E+01	-.13553E+00	-.40754E+00	.57324E+00	.36519E-02	.13112E+00	.13724E-01	-.10258E+01	.19519E-01
.99200E+00	.12400E+01	-.13695E+00	-.40743E+00	.57109E+00	.31726E-02	.12453E+00	.12151E-01	-.10269E+01	.17379E-01
.99300E+00	.12100E+01	-.13837E+00	-.40732E+00	.56893E+00	.27118E-02	.11754E+00	.10591E-01	-.10279E+01	.15231E-01
.99400E+00	.11800E+01	-.13978E+00	-.40721E+00	.56678E+00	.22696E-02	.11134E+00	.90435E-02	-.10290E+01	.13073E-01
.99500E+00	.11500E+01	-.14119E+00	-.40710E+00	.56452E+00	.18460E-02	.10482E+00	.75090E-02	-.10301E+01	.10907E-01
.99600E+00	.11200E+01	-.14250E+00	-.40700E+00	.56236E+00	.14410E-02	.98286E-01	.59874E-02	-.10312E+01	.87329E-02
.99700E+00	.10900E+01	-.14400E+00	-.40698E+00	.56030E+00	.10546E-02	.91763E-01	.44787E-02	-.10322E+01	.65502E-02
.99800E+00	.10600E+01	-.14539E+00	-.40677E+00	.55814E+00	.8692E-03	.85254E-01	.29830E-02	-.10333E+01	.43592E-02
.99900E+00	.10300E+01	-.14678E+00	-.40656E+00	.55598E+00	.33786E-03	.78761E-01	.15003E-02	-.10343E+01	.21603E-02
.10000E+01	.10000E+01	-.14816E+00	-.40655E+00	.55381E+00	.74921E-05	.72822E-01	.30675E-04	-.10353E+01	-.46590E-04



THEIA R .11791E+01

DELTA	USAR	VSAR	SGR1	SGRF	SIGR	SIGT	SIGRT
.26780E+00	.55656E+00	.40687E+00	.41498E-02	.18667E+01	-.83645E-02	-.11764E+00	.15309E-01
.26899E+00	.55655E+00	.40534E+00	.36519E-02	.18652E+01	-.76424E-02	-.10976E+00	.13802E-01
.25999E+00	.55655E+00	.40392E+00	.31726E-02	.18637E+01	-.68953E-02	-.10187E+00	.12289E-01
.27109E+00	.55604E+00	.40230E+00	.27118E-02	.18622E+01	-.61232E-02	-.93987E+01	.10770E-01
.27219E+00	.55583E+00	.40077E+00	.22696E-02	.18607E+01	-.53261E-02	-.86104E-01	.92442E-02
.27330E+00	.55563E+00	.39925E+00	.18460E-02	.18592E+01	-.45040E-02	-.78222E+01	.77126E-02
.27442E+00	.55525E+00	.39772E+00	.14410E-02	.19577E+01	-.36569E-02	-.70342E+01	.61751E-02
.27554E+00	.55521E+00	.39619E+00	.10546E-02	.18563E+01	-.27848E-02	-.62463E+01	.46317E-02
.27667E+00	.55500E+00	.39466E+00	.68692E-03	.18548E+01	-.18877E-02	-.54584E+01	.30825E-02
.27781E+00	.55479E+00	.39314E+00	.3796E-03	.18534E+01	-.96560E-03	-.46707E+01	.15276E-02
.27895E+00	.55458E+00	.39160E+00	.74921E-05	.18520E+01	-.18504E-04	-.38830E+01	-.32944E-04

THEIA R .15708E+01

DELTA	USAR	VSAR	SGR1	SGRF	SIGR	SIGT	SIGRT
.43428E+00	.95608E+00	.52031E-14	.41498E-02	.25929E+01	-.18171E-01	.25806E+00	.23340E-15
.43641E+00	.95575E+00	.61799E-14	.36519E-02	.25835E+01	-.16493E-01	.26967E+00	.21043E-15
.43855E+00	.95541E+00	.61567E-14	.31726E-02	.25841E+01	-.14785E-01	.28127E+00	.18736E-15
.44069E+00	.95508E+00	.61335E-14	.27118E-02	.25847E+01	-.13046E-01	.29287E+00	.16420E-15
.44284E+00	.95474E+00	.61102E-14	.22696E-02	.25853E+01	-.11278E-01	.30447E+00	.14084E-15
.44499E+00	.95440E+00	.60870E-14	.18460E-02	.25859E+01	-.94799E-02	.31605E+00	.11759E-15
.44716E+00	.95406E+00	.60637E-14	.14410E-02	.25865E+01	-.76516E-02	.32764E+00	.94146E-16
.44932E+00	.95372E+00	.60404E-14	.10546E-02	.25872E+01	-.57934E-02	.33922E+00	.70615E-16
.45150E+00	.95338E+00	.60171E-14	.68692E-03	.25878E+01	-.39052E-02	.35080E+00	.46995E-16
.45368E+00	.95304E+00	.59938E-14	.3796E-03	.25885E+01	-.19870E-02	.36237E+00	.23289E-16
.45586E+00	.95270E+00	.59704E-14	.74921E-05	.25892E+01	-.38874E-04	.37394E+00	-.50227E-18

THEIA R .19635E+01

DELTA	USAR	VSAR	SGR1	SGRF	SIGR	SIGT	SIGRT
.26790E+00	.55656E+00	.40687E+00	.41498E-02	.18667E+01	-.83645E-02	-.11764E+00	.15309E-01
.26899E+00	.55655E+00	.40534E+00	.36519E-02	.18652E+01	-.76424E-02	-.10976E+00	.13802E-01
.26999E+00	.55655E+00	.40392E+00	.31726E-02	.18637E+01	-.68953E-02	-.10187E+00	.12289E-01
.27109E+00	.55604E+00	.40230E+00	.27118E-02	.18622E+01	-.61232E-02	-.93987E+01	.10770E-01
.27219E+00	.55583E+00	.40077E+00	.22696E-02	.18607E+01	-.53261E-02	-.86104E+01	.92442E-02
.27330E+00	.55563E+00	.39925E+00	.18460E-02	.18592E+01	-.45040E-02	-.78222E+01	.77126E-02
.27442E+00	.55525E+00	.39772E+00	.14410E-02	.18577E+01	-.36569E-02	-.70342E+01	.61751E-02
.27554E+00	.55521E+00	.39619E+00	.10546E-02	.18563E+01	-.27848E-02	-.62463E+01	.46317E-02
.27667E+00	.55500E+00	.39466E+00	.68692E-03	.18548E+01	-.18877E-02	-.54584E+01	.30825E-02
.27781E+00	.55479E+00	.39314E+00	.3796E-03	.18534E+01	-.96560E-03	-.46707E+01	.15276E-02
.27895E+00	.55458E+00	.39160E+00	.74921E-05	.18520E+01	-.18504E-04	-.38830E+01	.32944E-04

Appendix B

Numerical Results Obtained for  
Model VI, Set I

Set I, Model VI - Core

THETA 0. (P=0)									
R	RHOBAR	DELTA	UBAR	VBAR	SGRI	SGRF	SGRR	SIGTT	SIGRT
0.	.48100E+01	.51483E+00	0.	0.	.77338E+00	.81069E+00	.69875E+00	.81069E+00	0.
.50000E-01	.47743E+01	.51433E+00	-.32661E+00	0.	.76940E+00	.80961E+00	.69865E+00	.80961E+00	0.
.10000E+00	.47255E+01	.51286E+00	-.64745E+00	0.	.75756E+00	.80645E+00	.69834E+00	.80645E+00	0.
.15000E+00	.46637E+01	.51048E+00	-.95709E+00	0.	.73807E+00	.80134E+00	.69783E+00	.80134E+00	0.
.20000E+00	.45889E+01	.50724E+00	-.12506E+01	0.	.71116E+00	.79446E+00	.69710E+00	.79446E+00	0.
.25000E+00	.45009E+01	.50331E+00	-.15237E+01	0.	.67718E+00	.78604E+00	.69614E+00	.78604E+00	0.
.30000E+00	.44000E+01	.49874E+00	-.17728E+01	0.	.63651E+00	.77635E+00	.69494E+00	.77635E+00	0.
.35000E+00	.42860E+01	.49369E+00	-.19953E+01	0.	.58961E+00	.76569E+00	.69347E+00	.76569E+00	0.
.40000E+00	.41589E+01	.48830E+00	-.21897E+01	0.	.53699E+00	.75443E+00	.69173E+00	.75443E+00	0.
.45000E+00	.40188E+01	.48275E+00	-.23557E+01	0.	.47925E+00	.74295E+00	.68968E+00	.74295E+00	0.
.50000E+00	.38656E+01	.47723E+00	-.24842E+01	0.	.41703E+00	.73170E+00	.68729E+00	.73170E+00	0.
.55000E+00	.36994E+01	.47195E+00	-.26076E+01	0.	.35105E+00	.72117E+00	.68454E+00	.72117E+00	0.

THETA .39270E+00									
R	RHOBAR	DELTA	UBAR	VBAR	SGRI	SGRF	SGRR	SIGTT	SIGRT
0.	.48100E+01	.51483E+00	0.	0.	.77338E+00	.81069E+00	.71514E+00	.79430E+00	.39578E-01
.50000E-01	.47743E+01	.51386E+00	-.25299E+00	.17741E+00	.76940E+00	.80894E+00	.71419E+00	.79263E+00	.39269E-01
.10000E+00	.47255E+01	.51098E+00	-.50150E+00	.34974E+00	.75756E+00	.80376E+00	.71135E+00	.78768E+00	.38367E-01
.15000E+00	.46637E+01	.50628E+00	-.74134E+00	.51226E+00	.73807E+00	.79531E+00	.70667E+00	.77961E+00	.36927E-01
.20000E+00	.45889E+01	.49884E+00	-.96470E+00	.66086E+00	.71116E+00	.78380E+00	.70019E+00	.76861E+00	.35020E-01
.25000E+00	.45009E+01	.49180E+00	-.11802E+01	.79216E+00	.67718E+00	.76948E+00	.69197E+00	.75491E+00	.32740E-01
.30000E+00	.44000E+01	.48230E+00	-.13732E+01	.90272E+00	.63651E+00	.75264E+00	.68210E+00	.73879E+00	.30195E-01
.35000E+00	.42860E+01	.47151E+00	-.15457E+01	.99418E+00	.58961E+00	.73366E+00	.67060E+00	.72060E+00	.27514E-01
.40000E+00	.41589E+01	.45963E+00	-.16964E+01	.10635E+01	.53699E+00	.71292E+00	.65774E+00	.70070E+00	.24845E-01
.45000E+00	.40188E+01	.44687E+00	-.19252E+01	.11130E+01	.47925E+00	.69089E+00	.64345E+00	.67952E+00	.22355E-01
.50000E+00	.38656E+01	.43348E+00	-.21328E+01	.11457E+01	.41703E+00	.66807E+00	.62792E+00	.65753E+00	.20227E-01
.55000E+00	.36994E+01	.41972E+00	-.20211E+01	.11664E+01	.35105E+00	.64500E+00	.61129E+00	.63525E+00	.18667E-01

THETA .74540E+00									
R	RHOBAR	DELTA	UBAR	VBAR	SGRI	SGRF	SGRR	SIGTT	SIGRT
0.	.48100E+01	.51483E+00	0.	0.	.77338E+00	.81069E+00	.75472E+00	.75472E+00	.55972E-01
.50000E-01	.47743E+01	.51272E+00	-.75237E-01	.25090E+00	.76940E+00	.80731E+00	.75171E+00	.75161E+00	.55535E-01
.10000E+00	.47255E+01	.50646E+00	-.14915E+00	.49460E+00	.75756E+00	.79727E+00	.74276E+00	.74237E+00	.54259E-01
.15000E+00	.46637E+01	.49615E+00	-.22050E+00	.72444E+00	.73807E+00	.78077E+00	.72801E+00	.72716E+00	.52222E-01
.20000E+00	.45889E+01	.49194E+00	-.25915E+00	.93459E+00	.71116E+00	.76806E+00	.70765E+00	.70619E+00	.49526E-01
.25000E+00	.45009E+01	.48402E+00	-.35115E+00	.1203E+01	.67718E+00	.72948E+00	.69192E+00	.67974E+00	.46301E-01
.30000E+00	.44000E+01	.47621E+00	-.40872E+00	.1391E+01	.63651E+00	.69541E+00	.65112E+00	.64813E+00	.42702E-01
.35000E+00	.42860E+01	.47197E+00	-.46029E+00	.14060E+01	.58961E+00	.65632E+00	.61537E+00	.61173E+00	.39911E-01
.40000E+00	.41589E+01	.46040E+00	-.50556E+00	.15040E+01	.53699E+00	.61273E+00	.57564E+00	.57099E+00	.35137E-01
.45000E+00	.40188E+01	.45024E+00	-.54451E+00	.15740E+01	.47925E+00	.56521E+00	.53186E+00	.52639E+00	.31614E-01
.50000E+00	.38656E+01	.42795E+00	-.57746E+00	.16202E+01	.41703E+00	.51443E+00	.48459E+00	.47847E+00	.28606E-01
.55000E+00	.36994E+01	.429365E+00	-.60508E+00	.16495E+01	.35105E+00	.44111E+00	.43442E+00	.42782E+00	.26399E-01

THETA	R	DELTA	UBAR	VBAR	SGR1	SGRF	SGR2	SIOT1	SIOT2	SIORT
0.	.11791E+01	.51483E+00	0.	0.	.77338E+00	.81069E+00	.79430E+00	.71514E+00	.71514E+00	.39578E-01
.50000E-01	.48100E+01	.51159E+00	.10251E+00	.17741E+00	.76940E+00	.80568E+00	.78923E+00	.71060E+00	.71060E+00	.39269E-01
.10000E+00	.47743E+01	.50193E+00	.20320E+00	.34974E+00	.75756E+00	.79078E+00	.77417E+00	.69706E+00	.69706E+00	.38367E-01
.13000E+00	.47255E+01	.49601E+00	.30035E+00	.51226E+00	.73807E+00	.76622E+00	.74934E+00	.67470E+00	.67470E+00	.36927E-01
.20000E+00	.46637E+01	.46403E+00	.39239E+00	.66086E+00	.71116E+00	.73232E+00	.71511E+00	.64377E+00	.64377E+00	.35020E-01
.25000E+00	.45889E+01	.43623E+00	.47793E+00	.79216E+00	.67718E+00	.68948E+00	.67187E+00	.60457E+00	.60457E+00	.32740E-01
.30000E+00	.45009E+01	.40291E+00	.55531E+00	.90372E+00	.63651E+00	.63818E+00	.62013E+00	.55746E+00	.55746E+00	.30195E-01
.35000E+00	.44000E+01	.36443E+00	.62514E+00	.99418E+00	.58961E+00	.57899E+00	.56049E+00	.50287E+00	.50287E+00	.27514E-01
.40000E+00	.41589E+01	.32118E+00	.68534E+00	.10635E+01	.53699E+00	.51253E+00	.49362E+00	.44128E+00	.44128E+00	.24845E-01
.45000E+00	.40188E+01	.27361E+00	.73619E+00	.11130E+01	.47925E+00	.43954E+00	.42026E+00	.37326E+00	.37326E+00	.22355E-01
.50000E+00	.38656E+01	.22222E+00	.77784E+00	.11457E+01	.41703E+00	.36080E+00	.34124E+00	.29940E+00	.29940E+00	.20227E-01
.55000E+00	.36994E+01	.15757E+00	.81091E+00	.11664E+01	.35105E+00	.27721E+00	.25756E+00	.22038E+00	.22038E+00	.18667E-01

THETA	R	DELTA	UBAR	VBAR	SGR1	SGRF	SGR2	SIOT1	SIOT2	SIORT
0.	.15708E+01	.51483E+00	0.	0.	.77338E+00	.81069E+00	.81059E+00	.69875E+00	.69875E+00	.60342E-15
.50000E-01	.48100E+01	.51112E+00	.17614E+00	.27049E-14	.76940E+00	.80501E+00	.80478E+00	.69361E+00	.69361E+00	.59870E-15
.10000E+00	.47743E+01	.50006E+00	.34915E+00	.53321E-14	.75756E+00	.78809E+00	.78718E+00	.67829E+00	.67829E+00	.58495E-15
.13000E+00	.47255E+01	.49182E+00	.51610E+00	.78099E-14	.73807E+00	.76019E+00	.75818E+00	.65297E+00	.65297E+00	.56299E-15
.20000E+00	.46637E+01	.45661E+00	.67428E+00	.10075E-13	.71116E+00	.72165E+00	.71822E+00	.61701E+00	.61701E+00	.53392E-15
.25000E+00	.45889E+01	.42472E+00	.82135E+00	.12077E-13	.67718E+00	.67291E+00	.66770E+00	.57343E+00	.57343E+00	.49915E-15
.30000E+00	.45009E+01	.39647E+00	.95533E+00	.13778E-13	.63651E+00	.61448E+00	.60730E+00	.51990E+00	.51990E+00	.46035E-15
.35000E+00	.44000E+01	.34225E+00	.10747E+01	.15157E-13	.58961E+00	.54695E+00	.53788E+00	.45777E+00	.45777E+00	.41948E-15
.40000E+00	.41589E+01	.29251E+00	.11786E+01	.16214E-13	.53699E+00	.47103E+00	.45963E+00	.38756E+00	.38756E+00	.37879E-15
.45000E+00	.40188E+01	.23773E+00	.12667E+01	.16969E-13	.47925E+00	.38748E+00	.37403E+00	.30983E+00	.30983E+00	.34082E-15
.50000E+00	.38656E+01	.17847E+00	.13392E+01	.17467E-13	.41703E+00	.29717E+00	.28194E+00	.22823E+00	.22823E+00	.30039E-15
.55000E+00	.36994E+01	.11534E+00	.13974E+01	.17783E-13	.35105E+00	.20104E+00	.18430E+00	.13446E+00	.13446E+00	.28459E-15

THETA	R	DELTA	UBAR	VBAR	SGR1	SGRF	SGR2	SIOT1	SIOT2	SIORT
0.	.19635E+01	.51483E+00	0.	0.	.77338E+00	.81069E+00	.79430E+00	.71514E+00	.71514E+00	.39578E-01
.50000E-01	.48100E+01	.51159E+00	.10251E+00	.17741E+00	.76940E+00	.80568E+00	.78923E+00	.71060E+00	.71060E+00	.39269E-01
.10000E+00	.47743E+01	.50193E+00	.20320E+00	.34974E+00	.75756E+00	.79078E+00	.77417E+00	.69706E+00	.69706E+00	.38367E-01
.13000E+00	.47255E+01	.49601E+00	.30035E+00	.51226E+00	.73807E+00	.76622E+00	.74934E+00	.67470E+00	.67470E+00	.36927E-01
.20000E+00	.46637E+01	.46403E+00	.39239E+00	.66086E+00	.71116E+00	.73232E+00	.71511E+00	.64377E+00	.64377E+00	.35020E-01
.25000E+00	.45889E+01	.43623E+00	.47793E+00	.79216E+00	.67718E+00	.68948E+00	.67187E+00	.60457E+00	.60457E+00	.32740E-01
.30000E+00	.45009E+01	.40291E+00	.55531E+00	.90372E+00	.63651E+00	.63818E+00	.62013E+00	.55746E+00	.55746E+00	.30195E-01
.35000E+00	.44000E+01	.36443E+00	.62514E+00	.99418E+00	.58961E+00	.57899E+00	.56049E+00	.50287E+00	.50287E+00	.27514E-01
.40000E+00	.41589E+01	.32118E+00	.68534E+00	.10635E+01	.53699E+00	.51253E+00	.49362E+00	.44128E+00	.44128E+00	.24845E-01
.45000E+00	.40188E+01	.27361E+00	.73619E+00	.11130E+01	.47925E+00	.43954E+00	.42026E+00	.37326E+00	.37326E+00	.22355E-01
.50000E+00	.38656E+01	.22222E+00	.77784E+00	.11457E+01	.41703E+00	.36080E+00	.34124E+00	.29940E+00	.29940E+00	.20227E-01
.55000E+00	.36994E+01	.15757E+00	.81091E+00	.11664E+01	.35105E+00	.27721E+00	.25756E+00	.22038E+00	.22038E+00	.18667E-01

# Set I, Model VI -- Lower Mantle

THETA R (P=0)	RHOBAR (P)	DELTA (A)	UBAR (U)	VBAR (V)	( $\bar{\sigma}_{\eta}$ ) SGR1	( $\bar{\sigma}_{\eta}$ ) SGRF	( $\bar{\sigma}_{\eta}$ ) SIGRR	( $\bar{\sigma}_{\eta}$ ) SIGTT	( $\bar{\sigma}_{\eta}$ ) SIGRT
.55000E+00	.20600E+01	.59873E+00	-.25074E+01	0.	.35105E+00	.10367E+01	.68456E+00	.10367E+01	0.
.60000E+00	.20159E+01	.51028E+00	-.25661E+01	0.	.31401E+00	.82566E+00	.69931E+00	.82566E+00	0.
.65000E+00	.19638E+01	.44135E+00	-.26772E+01	0.	.27439E+00	.68195E+00	.66917E+00	.68195E+00	0.
.70000E+00	.19038E+01	.39515E+00	-.26643E+01	0.	.23262E+00	.57560E+00	.62301E+00	.57560E+00	0.
.75000E+00	.18359E+01	.33750E+00	-.26383E+01	0.	.18911E+00	.49068E+00	.57334E+00	.49068E+00	0.
.80000E+00	.17601E+01	.29570E+00	-.26044E+01	0.	.14432E+00	.41838E+00	.52540E+00	.41838E+00	0.
.85000E+00	.16763E+01	.25802E+00	-.25646E+01	0.	.98722E-01	.35372E+00	.48113E+00	.35372E+00	0.
.90000E+00	.15846E+01	.22330E+00	-.25193E+01	0.	.52810E-01	.29382E+00	.44098E+00	.29382E+00	0.
.95000E+00	.14850E+01	.19077E+00	-.24686E+01	0.	.71279E-02	.23704E+00	.40473E+00	.23704E+00	0.
.10000E+01	.13775E+01	.15996E+00	-.24121E+01	0.	-.37752E-01	.18247E+00	.37193E+00	.18247E+00	0.

THETA R (P=0)	RHOBAR (P)	DELTA (A)	UBAR (U)	VBAR (V)	( $\bar{\sigma}_{\eta}$ ) SGR1	( $\bar{\sigma}_{\eta}$ ) SGRF	( $\bar{\sigma}_{\eta}$ ) SIGRR	( $\bar{\sigma}_{\eta}$ ) SIGTT	( $\bar{\sigma}_{\eta}$ ) SIGRT
.55000E+00	.20600E+01	.51856E+00	-.20209E+01	.11663E+01	.35105E+00	.93746E+00	.61130E+00	.83996E+00	.19659E-01
.60000E+00	.20159E+01	.44421E+00	-.20667E+01	.10592E+01	.31401E+00	.75637E+00	.61467E+00	.67521E+00	.75667E-01
.65000E+00	.19638E+01	.38476E+00	-.20754E+01	.98917E+00	.27439E+00	.62995E+00	.58245E+00	.55998E+00	.99112E-01
.70000E+00	.19038E+01	.33497E+00	-.20654E+01	.93850E+00	.23262E+00	.53371E+00	.53725E+00	.47207E+00	.10503E+00
.75000E+00	.18359E+01	.29151E+00	-.20455E+01	.89650E+00	.18911E+00	.45468E+00	.48894E+00	.39970E+00	.10156E+00
.80000E+00	.17601E+01	.25266E+00	-.20195E+01	.85778E+00	.14432E+00	.38574E+00	.44169E+00	.33644E+00	.93021E-01
.85000E+00	.16763E+01	.21690E+00	-.19899E+01	.81757E+00	.98722E-01	.32290E+00	.39713E+00	.27868E+00	.81810E-01
.90000E+00	.15846E+01	.18322E+00	-.19544E+01	.77379E+00	.52810E-01	.26390E+00	.35571E+00	.22437E+00	.69309E-01
.95000E+00	.14850E+01	.15134E+00	-.19158E+01	.72501E+00	.71279E-02	.20751E+00	.31739E+00	.17242E+00	.56366E-01
.10000E+01	.13775E+01	.12099E+00	-.18727E+01	.67051E+00	-.37752E-01	.15311E+00	.28194E+00	.12228E+00	.43539E-01

THETA R (P=0)	RHOBAR (P)	DELTA (A)	UBAR (U)	VBAR (V)	( $\bar{\sigma}_{\eta}$ ) SGR1	( $\bar{\sigma}_{\eta}$ ) SGRF	( $\bar{\sigma}_{\eta}$ ) SIGRR	( $\bar{\sigma}_{\eta}$ ) SIGTT	( $\bar{\sigma}_{\eta}$ ) SIGRT
.55000E+00	.20600E+01	.32501E+00	-.60504E+00	.16494E+01	.35105E+00	.69780E+00	.43443E+00	.36492E+00	.26388E-01
.60000E+00	.20159E+01	.28469E+00	-.61956E+00	.14979E+01	.31401E+00	.58911E+00	.41033E+00	.31199E+00	.10701E+00
.65000E+00	.19638E+01	.24814E+00	-.62247E+00	.13989E+01	.27439E+00	.50442E+00	.37309E+00	.26554E+00	.14016E+00
.70000E+00	.19038E+01	.21381E+00	-.61975E+00	.13272E+01	.23262E+00	.43258E+00	.33022E+00	.22212E+00	.14853E+00
.75000E+00	.18359E+01	.19094E+00	-.61424E+00	.12683E+01	.18911E+00	.36778E+00	.28517E+00	.19008E+00	.14362E+00
.80000E+00	.17601E+01	.16874E+00	-.60725E+00	.12131E+01	.14432E+00	.30695E+00	.23959E+00	.13863E+00	.13155E+00
.85000E+00	.16763E+01	.11730E+00	-.59929E+00	.11562E+01	.98722E-01	.24850E+00	.19432E+00	.97511E-01	.11570E+00
.90000E+00	.15846E+01	.85454E-01	-.59055E+00	.10943E+01	.52810E-01	.19168E+00	.14985E+00	.56717E-01	.98017E-01
.95000E+00	.14850E+01	.56258E-01	-.58098E+00	.10253E+01	.71279E-02	.13624E+00	.10653E+00	.16435E-01	.79714E-01
.10000E+01	.13775E+01	.26886E-01	-.57050E+00	.94824E+00	-.37752E-01	.82219E-01	.64669E-01	-.23036E-01	.61573E-01



THEIA	R	RHOBAR	DELTA	UBAR	VBAR	SGR1	SGRF	SIGR	SIGTT	SIGRT
.55000E+00	.11781E+01	.20600E+01	.13146E+00	.81087E+00	.11663E+01	.35105E+00	.45814E+00	.25700E+00	-.11013E+00	.18659E-01
.60000E+00	.20139E+01	.12519E+00	.82750E+00	.10592E+01	.10592E+01	.31401E+00	.42184E+00	.20600E+00	-.51223E-01	.75667E-01
.65000E+00	.19638E+01	.11152E+00	.83046E+00	.98917E+00	.98917E+00	.27439E+00	.37890E+00	.16372E+00	-.28912E-01	.99112E-01
.70000E+00	.19038E+01	.92653E-01	.82594E+00	.93850E+00	.93850E+00	.23262E+00	.33145E+00	.12318E+00	-.27827E-01	.10503E+00
.75000E+00	.18359E+01	.70060E-01	.81700E+00	.89680E+00	.89680E+00	.18911E+00	.28088E+00	.81405E+00	-.39552E-01	.10184E+00
.80000E+00	.17601E+01	.44822E-01	.80496E+00	.85778E+00	.85778E+00	.14432E+00	.22815E+00	.37498E+00	-.59180E-01	.93021E-01
.85000E+00	.16763E+01	.17793E-01	.79036E+00	.81757E+00	.81757E+00	.98722E-01	.17410E+00	-.84780E-02	-.83656E-01	.81810E-01
.90000E+00	.15846E+01	-.10308E-01	.77331E+00	.77379E+00	.77379E+00	.52810E-01	.11946E+00	-.56004E-01	-.11094E+00	.69309E-01
.95000E+00	.14850E+01	-.38842E-01	.75380E+00	.72501E+00	.72501E+00	.71279E-02	.64959E+01	-.10433E+00	-.13955E+00	.56366E-01
.10000E+01	.13775E+01	-.67213E-01	.73173E+00	.67051E+00	.67051E+00	-.37752E-01	.11332E-01	-.15260E+00	-.16835E+00	.43539E-01

THEIA	R	RHOBAR	DELTA	UBAR	VBAR	SGR1	SGRF	SIGR	SIGTT	SIGRT
.55000E+00	.15708E+01	.20600E+01	.51290E-01	.13974E+01	.17782E-13	.35105E+00	.35807E+00	.18430E+00	-.30490E+00	.28448E-15
.60000E+00	.20159E+01	.59102E-01	.14270E+01	.16149E-13	.16149E-13	.31401E+00	.35256E+00	.12138E+00	-.20167E+00	.11536E-14
.65000E+00	.19638E+01	.54928E-01	.14323E+01	.15081E-13	.15081E-13	.27439E+00	.32690E+00	.77002E+00	-.13988E+00	.15111E-14
.70000E+00	.19038E+01	.42468E-01	.14248E+01	.14308E-13	.14308E-13	.23262E+00	.28957E+00	.37422E+00	-.13136E+00	.16013E-14
.75000E+00	.18359E+01	.24174E-02	.14088E+01	.13073E-13	.13073E-13	.18911E+00	.24488E+00	.29978E+02	-.13082E+00	.18484E-14
.80000E+00	.17601E+01	.17771E-02	.13899E+01	.13078E-13	.13078E-13	.14432E+00	.19551E+00	-.46212E-01	-.14112E+00	.14102E-14
.85000E+00	.16763E+01	-.23423E-01	.13660E+01	.12435E-13	.12435E-13	.98722E-01	.14320E+00	.92481E-01	-.15870E+00	.12473E-14
.90000E+00	.15846E+01	-.50398E-01	.13382E+01	.11797E-13	.11797E-13	.52810E-01	.89543E-01	-.14127E+00	-.18038E+00	.10567E-14
.95000E+00	.14850E+01	-.79238E-01	.13067E+01	.11054E-13	.11054E-13	.71279E-02	.35435E-01	-.10137E+00	-.20417E+00	.85937E-15
.10000E+01	.13775E+01	-.10619E+00	.12711E+01	.10223E-13	.10223E-13	-.37752E-01	-.18030E-01	-.24259E+00	-.22834E+00	.66380E-15

THEIA	R	RHOBAR	DELTA	UBAR	VBAR	SGR1	SGRF	SIGR	SIGTT	SIGRT
.55000E+00	.19635E+01	.20600E+01	.13146E+00	.81087E+00	-.11693E+01	.35105E+00	.45814E+00	.25756E+00	-.11013E+00	-.19659E-01
.60000E+00	.20159E+01	.12518E+00	.82750E+00	.82750E+00	-.10592E+01	.31401E+00	.42184E+00	.20600E+00	-.51223E-01	.75667E-01
.65000E+00	.19638E+01	.11152E+00	.83046E+00	.98917E+00	-.98917E+00	.27439E+00	.37890E+00	.16372E+00	-.28912E-01	.99112E-01
.70000E+00	.19038E+01	.92653E-01	.82594E+00	.93850E+00	-.93850E+00	.23262E+00	.33145E+00	.12318E+00	-.27827E-01	.10503E+00
.75000E+00	.18359E+01	.70060E-01	.81700E+00	.89680E+00	-.89680E+00	.18911E+00	.28088E+00	.81405E+00	-.39552E-01	.10184E+00
.80000E+00	.17601E+01	.44822E-01	.80496E+00	.85778E+00	-.85778E+00	.14432E+00	.22815E+00	.37498E+00	-.59180E-01	.93021E-01
.85000E+00	.16763E+01	.17793E-01	.79036E+00	.81757E+00	-.81757E+00	.98722E-01	.17410E+00	-.84780E-02	-.83656E-01	.81810E-01
.90000E+00	.15846E+01	-.10308E-01	.77331E+00	.77379E+00	-.77379E+00	.52810E-01	.11946E+00	-.56004E-01	-.11094E+00	.69309E-01
.95000E+00	.14850E+01	-.38842E-01	.75380E+00	.72501E+00	-.72501E+00	.71279E-02	.64959E-01	-.10433E+00	-.13955E+00	.56366E-01
.10000E+01	.13775E+01	-.67213E-01	.73173E+00	.67051E+00	-.67051E+00	-.37752E-01	.11332E-01	-.15260E+00	-.16835E+00	.43539E-01

# Set I, Model VI — Upper Mantle

STAR 0. (0-0)	RHOBAR (P)	DELTA (A)	U3AR (U)	VBAR (V)	SGR1	(SGR)	SGRF	(SGR)	SGRT	(SGR)	SIGRT
.89000E+00	.16456E+01	-.91816E-01	-.25364E+01	0.	.69973E-01	-.49035E+00	-.49035E+00	.46603E+00	-.49035E+00	0.	0.
.89000E+00	.15597E+01	-.15016E+00	-.25306E+01	0.	.63141E-01	-.64003E+00	-.64003E+00	.43835E+00	-.64003E+00	0.	0.
.90000E+00	.14847E+01	-.20749E+00	-.25244E+01	0.	.56653E-01	-.78557E+00	-.78557E+00	.40805E+00	-.78557E+00	0.	0.
.91000E+00	.14206E+01	-.26389E+00	-.25177E+01	0.	.50453E-01	-.92732E+00	-.92732E+00	.37547E+00	-.92732E+00	0.	0.
.92000E+00	.13674E+01	-.31939E+00	-.25105E+01	0.	.44883E-01	-.10656E+01	-.10656E+01	.34094E+00	-.10656E+01	0.	0.
.93000E+00	.13251E+01	-.37408E+00	-.25029E+01	0.	.38683E-01	-.12008E+01	-.12008E+01	.30473E+00	-.12008E+01	0.	0.
.94000E+00	.12917E+01	-.42800E+00	-.24949E+01	0.	.32991E-01	-.13331E+01	-.13331E+01	.26711E+00	-.13331E+01	0.	0.
.95000E+00	.12732E+01	-.48122E+00	-.24866E+01	0.	.27345E-01	-.14629E+01	-.14629E+01	.22829E+00	-.14629E+01	0.	0.
.96000E+00	.12636E+01	-.53377E+00	-.24788E+01	0.	.21679E-01	-.15903E+01	-.15903E+01	.18849E+00	-.15903E+01	0.	0.
.97000E+00	.12648E+01	-.58572E+00	-.24688E+01	0.	.15929E-01	-.17156E+01	-.17156E+01	.14784E+00	-.17156E+01	0.	0.
.98000E+00	.12710E+01	-.63710E+00	-.24534E+01	0.	.10024E-01	-.18390E+01	-.18390E+01	.10665E+00	-.18390E+01	0.	0.
.99000E+00	.12800E+01	-.68796E+00	-.24497E+01	0.	.38964E-02	-.19607E+01	-.19607E+01	.64932E-01	-.19607E+01	0.	0.

THETA .30270E+00	RHOBAR	DELTA	U3AR	VBAR	SGR1	SGRF	SGRT	SIGRT	SIGRT
.88000E+00	.16456E+01	-.54348E-01	-.19674E+01	.79796E+00	.69973E-01	-.13347E+00	.37903E+00	-.55027E+00	.69909E-01
.89000E+00	.15597E+01	-.10067E+00	-.19630E+01	.77707E+00	.63141E-01	-.25940E+00	.35593E+00	-.66084E+00	.75780E-01
.90000E+00	.14847E+01	-.14617E+00	-.19593E+01	.75645E+00	.56653E-01	-.39189E+00	.33086E+00	-.78834E+00	.79084E-01
.91000E+00	.14206E+01	-.19291E+00	-.19531E+01	.73597E+00	.50453E-01	-.50119E+00	.30404E+00	-.87304E+00	.80000E-01
.92000E+00	.13674E+01	-.23492E+00	-.19477E+01	.71559E+00	.44883E-01	-.61759E+00	.27582E+00	-.97521E+00	.78689E-01
.93000E+00	.13251E+01	-.27832E+00	-.19419E+01	.69527E+00	.38683E-01	-.73133E+00	.24629E+00	-.10751E+01	.75295E-01
.94000E+00	.12937E+01	-.32108E+00	-.19357E+01	.67498E+00	.32991E-01	-.84268E+00	.21564E+00	-.11728E+01	.69946E-01
.95000E+00	.12732E+01	-.36329E+00	-.19293E+01	.65459E+00	.27345E-01	-.95145E+00	.19415E+00	-.12697E+01	.62757E-01
.96000E+00	.12636E+01	-.40498E+00	-.19226E+01	.63436E+00	.21679E-01	-.10591E+01	.15195E+00	-.13629E+01	.53828E-01
.97000E+00	.12648E+01	-.44620E+00	-.19155E+01	.61398E+00	.15929E-01	-.11645E+01	.11890E+00	-.14555E+01	.43251E-01
.98000E+00	.12710E+01	-.48699E+00	-.19084E+01	.59350E+00	.10024E-01	-.12648E+01	.85427E-01	-.15468E+01	.31102E-01
.99000E+00	.13000E+01	-.52739E+00	-.19009E+01	.57291E+00	.38964E-02	-.13709E+01	.51524E-01	-.15369E+01	.17453E-01

THETA .78540E+00	RHOBAR	DELTA	U3AR	VBAR	SGR1	SGRF	SGRT	SIGRT	SIGRT
.88000E+00	.16456E+01	.36104E-01	-.59392E+00	.11293E+01	.69973E-01	.72833E+00	.16899E+00	-.69492E+00	.99866E-01
.89000E+00	.15597E+01	.18904E-01	-.59272E+00	.10989E+01	.63141E-01	.65952E+00	.15694E+00	-.71106E+00	.10717E+00
.90000E+00	.14847E+01	.19612E-02	-.59151E+00	.10649E+01	.56653E-01	.59267E+00	.14450E+00	-.72673E+00	.11184E+00
.91000E+00	.14206E+01	-.14754E-01	-.59017E+00	.10408E+01	.50453E-01	.52758E+00	.13171E+00	-.74199E+00	.11314E+00
.92000E+00	.13674E+01	-.31075E-01	-.58874E+00	.10120E+01	.44883E-01	.46410E+00	.11860E+00	-.75689E+00	.11128E+00
.93000E+00	.13251E+01	-.47132E-01	-.58720E+00	.98326E+00	.38683E-01	.40204E+00	.10519E+00	-.77148E+00	.10649E+00
.94000E+00	.12937E+01	-.62959E-01	-.58557E+00	.95566E+00	.32991E-01	.34138E+00	.91519E-01	-.79581E+00	.98918E-01
.95000E+00	.12732E+01	-.79585E-01	-.58385E+00	.92987E+00	.27345E-01	.29185E+00	.77581E-01	-.79995E+00	.88751E-01
.96000E+00	.12636E+01	-.94044E-01	-.58205E+00	.90712E+00	.21679E-01	.23338E+00	.63382E+00	-.81392E+00	.76125E-01
.97000E+00	.12648E+01	-.10937E+00	-.58017E+00	.88829E+00	.15929E-01	.16542E+00	.48910E-01	-.82750E+00	.61165E-01
.98000E+00	.12710E+01	-.12459E+00	-.57822E+00	.86934E+00	.10024E-01	.10906E+00	.34181E-01	-.84161E+00	.43985E-01
.99000E+00	.13000E+01	-.13473E+00	-.57619E+00	.81021E+00	.38964E-02	.59944E-01	.19155E-01	-.85543E+00	.24682E-01

THEIR R .11781E+01

THEIR R	RHOBAR	DELTA	UBAR	VBAR	SGR1	SGRF	SIGR	SIGT	SIGT
.88000E+00	.16456E+01	.12656E+00	.77975E+00	.79786E+00	.69973E-01	.15901E+01	-.41052E-01	-.83957E+00	.69909E-01
.89000E+00	.15597E+01	.13828E+00	.77759E+00	.77707E+00	.63141E-01	.15784E+01	-.42043E-01	-.76129E+00	.75780E-01
.90000E+00	.14847E+01	.14989E+00	.77527E+00	.75845E+00	.56653E-01	.15672E+01	-.41855E-01	-.68513E+00	.79084E-01
.91000E+00	.14206E+01	.16140E+00	.77279E+00	.73597E+00	.50453E-01	.15561E+01	-.40660E-01	-.61094E+00	.80000E-01
.92000E+00	.13674E+01	.17279E+00	.77018E+00	.71559E+00	.44483E-01	.15458E+01	-.38623E-01	-.53857E+00	.78488E-01
.93000E+00	.13251E+01	.18405E+00	.76743E+00	.69527E+00	.38683E-01	.15355E+01	-.35899E-01	-.46790E+00	.75295E-01
.94000E+00	.12937E+01	.19517E+00	.76457E+00	.67498E+00	.32991E-01	.15254E+01	-.32638E-01	-.39880E+00	.69946E-01
.95000E+00	.12732E+01	.20612E+00	.76158E+00	.65469E+00	.27345E-01	.15156E+01	-.28986E-01	-.33118E+00	.62757E-01
.96000E+00	.12636E+01	.21699E+00	.75848E+00	.63436E+00	.21679E-01	.15058E+01	-.25092E-01	-.26496E+00	.53828E-01
.97000E+00	.12648E+01	.22746E+00	.75527E+00	.61398E+00	.15929E-01	.14962E+01	-.21064E-01	-.20005E+00	.43251E-01
.98000E+00	.12770E+01	.23782E+00	.75196E+00	.59350E+00	.10024E-01	.14865E+01	-.17064E-01	-.13638E+00	.31102E-01
.99000E+00	.13000E+01	.24792E+00	.74854E+00	.57291E+00	.38964E-02	.14769E+01	-.13214E-01	-.73910E-01	.17453E-01

THEIR R .15708E+01

THEIR R	RHOBAR	DELTA	UBAR	VBAR	SGR1	SGRF	SIGR	SIGT	SIGT
.88000E+00	.16456E+01	.16403E+00	.13497E+01	.12164E+13	.69973E-01	.19470E+01	-.12805E+00	-.89949E+00	.10658E-14
.89000E+00	.15597E+01	.19777E+00	.13452E+01	.11847E+13	.63141E-01	.19591E+01	-.12447E+00	-.79209E+00	.11554E-14
.90000E+00	.14847E+01	.21121E+00	.13414E+01	.11533E+13	.56653E-01	.19709E+01	-.11905E+00	-.66790E+00	.12057E-14
.91000E+00	.14206E+01	.23437E+00	.13374E+01	.11221E+13	.50453E-01	.19825E+01	-.11206E+00	-.55666E+00	.12197E-14
.92000E+00	.13674E+01	.25724E+00	.13331E+01	.10910E+13	.44483E-01	.19938E+01	-.10375E+00	-.44814E+00	.11907E-14
.93000E+00	.13251E+01	.27981E+00	.13285E+01	.10600E+13	.38683E-01	.20050E+01	-.94342E-01	-.34215E+00	.11479E-14
.94000E+00	.12937E+01	.30208E+00	.13291E+01	.10291E+13	.32991E-01	.20159E+01	-.84066E-01	-.23849E+00	.10664E-14
.95000E+00	.12732E+01	.32405E+00	.13189E+01	.99814E+14	.27345E-01	.20266E+01	-.73128E-01	-.13702E+00	.95879E-15
.96000E+00	.12636E+01	.34568E+00	.13137E+01	.96715E+14	.21679E-01	.20370E+01	-.61725E-01	-.37572E-01	.82067E-15
.97000E+00	.12648E+01	.36699E+00	.13084E+01	.93607E+14	.15929E-01	.20472E+01	-.50051E-01	.59973E-01	.65940E-15
.98000E+00	.12770E+01	.38793E+00	.13029E+01	.90486E+14	.10024E-01	.20571E+01	-.38290E-01	.15573E+00	.47410E-15
.99000E+00	.13000E+01	.40850E+00	.12973E+01	.87346E+14	.38964E-02	.20666E+01	-.26621E-01	.24980E+00	.26609E-15

THEIR R .19635E+01

THEIR R	RHOBAR	DELTA	UBAR	VBAR	SGR1	SGRF	SIGR	SIGT	SIGT
.88000E+00	.16456E+01	.12856E+00	.77975E+00	.79786E+00	.69973E-01	.15901E+01	-.41052E-01	-.83957E+00	.69909E-01
.89000E+00	.15597E+01	.13828E+00	.77759E+00	.77707E+00	.63141E-01	.15784E+01	-.42043E-01	-.76129E+00	.75780E-01
.90000E+00	.14847E+01	.14989E+00	.77527E+00	.75845E+00	.56653E-01	.15672E+01	-.41855E-01	-.68513E+00	.79084E-01
.91000E+00	.14206E+01	.16140E+00	.77279E+00	.73597E+00	.50453E-01	.15561E+01	-.40660E-01	-.61094E+00	.80000E-01
.92000E+00	.13674E+01	.17279E+00	.77018E+00	.71559E+00	.44483E-01	.15458E+01	-.38623E-01	-.53857E+00	.78488E-01
.93000E+00	.13251E+01	.18405E+00	.76743E+00	.69527E+00	.38683E-01	.15355E+01	-.35899E-01	-.46790E+00	.75295E-01
.94000E+00	.12937E+01	.19517E+00	.76457E+00	.67498E+00	.32991E-01	.15254E+01	-.32638E-01	-.39880E+00	.69946E-01
.95000E+00	.12732E+01	.20612E+00	.76158E+00	.65469E+00	.27345E-01	.15156E+01	-.28986E-01	-.33118E+00	.62757E-01
.96000E+00	.12636E+01	.21699E+00	.75848E+00	.63436E+00	.21679E-01	.15058E+01	-.25092E-01	-.26496E+00	.53828E-01
.97000E+00	.12648E+01	.22746E+00	.75527E+00	.61398E+00	.15929E-01	.14962E+01	-.21064E-01	-.20005E+00	.43251E-01
.98000E+00	.12770E+01	.23782E+00	.75196E+00	.59350E+00	.10024E-01	.14865E+01	-.17064E-01	-.13638E+00	.31102E-01
.99000E+00	.13000E+01	.24792E+00	.74854E+00	.57291E+00	.38964E-02	.14769E+01	-.13214E-01	-.73910E-01	.17453E-01



Set I- Model VI - Crust

THETA	R	(P)	RHOBAR	(P)	DELTA	(A)	UBAR	(U)	YEAR	(V)	SGR1	(S <sub>GR</sub> )	SGRF	(S <sub>GRF</sub> )	SGRR	(S <sub>GRR</sub> )	SGTT	(S <sub>GR</sub> )	SGT	(S <sub>GR</sub> )
.99000E+00	.13000E+01	.13000E+01	.13000E+01	.13000E+01	.93872E+00	.24496E+01	.0.	.0.	.41000E+02	.30834E+01	.65096E-01	.30834E+01	.0.	.0.	.65096E-01	.30834E+01	.0.	.0.	.0.	
.99100E+00	.12700E+01	.12700E+01	.12700E+01	.12700E+01	.94554E+00	.24496E+01	.0.	.0.	.36128E+02	.31023E+01	.58631E-01	.31023E+01	.0.	.0.	.58631E-01	.31023E+01	.0.	.0.	.0.	
.99200E+00	.12400E+01	.12400E+01	.12400E+01	.12400E+01	.95235E+00	.24481E+01	.0.	.0.	.31441E+02	.31212E+01	.52157E-01	.31212E+01	.0.	.0.	.52157E-01	.31212E+01	.0.	.0.	.0.	
.99300E+00	.12100E+01	.12100E+01	.12100E+01	.12100E+01	.95915E+00	.24474E+01	.0.	.0.	.26938E+02	.31401E+01	.45675E-01	.31401E+01	.0.	.0.	.45675E-01	.31401E+01	.0.	.0.	.0.	
.99400E+00	.11800E+01	.11800E+01	.11800E+01	.11800E+01	.96595E+00	.24466E+01	.0.	.0.	.22622E+02	.31580E+01	.39184E-01	.31580E+01	.0.	.0.	.39184E-01	.31580E+01	.0.	.0.	.0.	
.99500E+00	.11500E+01	.11500E+01	.11500E+01	.11500E+01	.97274E+00	.24459E+01	.0.	.0.	.19490E+02	.31777E+01	.32684E-01	.31777E+01	.0.	.0.	.32684E-01	.31777E+01	.0.	.0.	.0.	
.99600E+00	.11200E+01	.11200E+01	.11200E+01	.11200E+01	.97952E+00	.24452E+01	.0.	.0.	.14544E+02	.31965E+01	.26176E-01	.31965E+01	.0.	.0.	.26176E-01	.31965E+01	.0.	.0.	.0.	
.99700E+00	.10900E+01	.10900E+01	.10900E+01	.10900E+01	.98630E+00	.24444E+01	.0.	.0.	.10784E+02	.32153E+01	.19660E-01	.32153E+01	.0.	.0.	.19660E-01	.32153E+01	.0.	.0.	.0.	
.99800E+00	.10600E+01	.10600E+01	.10600E+01	.10600E+01	.99307E+00	.24437E+01	.0.	.0.	.72103E+03	.32340E+01	.13136E-01	.32340E+01	.0.	.0.	.13136E-01	.32340E+01	.0.	.0.	.0.	
.99900E+00	.10300E+01	.10300E+01	.10300E+01	.10300E+01	.99943E+00	.24429E+01	.0.	.0.	.38227E+03	.32528E+01	.66046E-02	.32528E+01	.0.	.0.	.66046E-02	.32528E+01	.0.	.0.	.0.	
.10000E+01	.10000E+01	.10000E+01	.10000E+01	.10000E+01	.10046E+01	.24422E+01	.0.	.0.	.62159E+04	.32714E+01	.65129E-04	.32714E+01	.0.	.0.	.65129E-04	.32714E+01	.0.	.0.	.0.	

THETA	R	19270E+00	RHOBAR	DELTA	UBAR	VBAR	SGR1	SGRF	SGRR	SGTT	SGT
.99000E+00	.13000E+01	.13000E+01	.13000E+01	.13000E+01	.72000E+00	.57287E+00	.41000E+02	.21262E+01	.51697E-01	.26055E+01	.17420E-01
.99100E+00	.12700E+01	.12700E+01	.12700E+01	.12700E+01	.72530E+00	.57079E+00	.36128E+02	.21422E+01	.46545E-01	.26193E+01	.15744E-01
.99200E+00	.12400E+01	.12400E+01	.12400E+01	.12400E+01	.73074E+00	.56871E+00	.31441E+02	.21581E+01	.41391E-01	.26331E+01	.14053E-01
.99300E+00	.12100E+01	.12100E+01	.12100E+01	.12100E+01	.73610E+00	.56663E+00	.26938E+02	.21741E+01	.36233E-01	.26468E+01	.12349E-01
.99400E+00	.11800E+01	.11800E+01	.11800E+01	.11800E+01	.74145E+00	.56455E+00	.22622E+02	.21900E+01	.31073E-01	.26605E+01	.10631E-01
.99500E+00	.11500E+01	.11500E+01	.11500E+01	.11500E+01	.74680E+00	.56246E+00	.18490E+02	.22055E+01	.25911E-01	.26742E+01	.8897E-02
.99600E+00	.11200E+01	.11200E+01	.11200E+01	.11200E+01	.75214E+00	.56038E+00	.14544E+02	.22214E+01	.20746E-01	.26879E+01	.71533E-02
.99700E+00	.10900E+01	.10900E+01	.10900E+01	.10900E+01	.75747E+00	.55829E+00	.10784E+02	.22376E+01	.15578E-01	.27015E+01	.53946E-02
.99800E+00	.10600E+01	.10600E+01	.10600E+01	.10600E+01	.76280E+00	.55620E+00	.72103E+03	.22535E+01	.10409E-01	.27152E+01	.36227E-02
.99900E+00	.10300E+01	.10300E+01	.10300E+01	.10300E+01	.76812E+00	.55412E+00	.38227E+03	.22693E+01	.52377E-02	.27288E+01	.18378E-02
.10000E+01	.10000E+01	.10000E+01	.10000E+01	.10000E+01	.77344E+00	.55203E+00	.62159E+04	.22850E+01	.64477E-04	.27424E+01	.39913E-04

THETA	R	78540E+00	RHOBAR	DELTA	UBAR	VBAR	SGR1	SGRF	SGRR	SGTT	SGT
.99000E+00	.13000E+01	.13000E+01	.13000E+01	.13000E+01	.12196E+00	.81017E+00	.41000E+02	.18480E+00	.19349E-01	.14519E+01	.24636E-01
.99100E+00	.12700E+01	.12700E+01	.12700E+01	.12700E+01	.12385E+00	.80722E+00	.36128E+02	.17587E+00	.17367E-01	.14532E+01	.22265E-01
.99200E+00	.12400E+01	.12400E+01	.12400E+01	.12400E+01	.12573E+00	.80428E+00	.31441E+02	.16695E+00	.15397E-01	.14546E+01	.19874E-01
.99300E+00	.12100E+01	.12100E+01	.12100E+01	.12100E+01	.12760E+00	.80133E+00	.26938E+02	.15906E+00	.13439E-01	.14559E+01	.17464E-01
.99400E+00	.11800E+01	.11800E+01	.11800E+01	.11800E+01	.12947E+00	.79839E+00	.22622E+02	.14918E+00	.11493E-01	.14572E+01	.15034E-01
.99500E+00	.11500E+01	.11500E+01	.11500E+01	.11500E+01	.13133E+00	.79544E+00	.18490E+02	.14033E+00	.95578E-02	.14586E+01	.12585E-01
.99600E+00	.11200E+01	.11200E+01	.11200E+01	.11200E+01	.13319E+00	.79249E+00	.14544E+02	.13149E+00	.76349E-02	.14599E+01	.10116E-01
.99700E+00	.10900E+01	.10900E+01	.10900E+01	.10900E+01	.13504E+00	.78954E+00	.10784E+02	.12267E+00	.57239E-02	.14612E+01	.76291E-02
.99800E+00	.10600E+01	.10600E+01	.10600E+01	.10600E+01	.13689E+00	.78659E+00	.72103E+03	.11387E+00	.38249E-02	.14625E+01	.51233E-02
.99900E+00	.10300E+01	.10300E+01	.10300E+01	.10300E+01	.13873E+00	.78364E+00	.38227E+03	.10502E+00	.19378E-02	.14638E+01	.25990E-02
.10000E+01	.10000E+01	.10000E+01	.10000E+01	.10000E+01	.14056E+00	.78069E+00	.62159E+04	.96331E+01	.62001E-04	.14650E+01	.56446E-04

THEYAM	R	RHOBAR	DELTA	UBAR	VBAR	SGR1	SGRF	SIGRR	SIGTT	SIGRT
.99000E+00	.13000E+01	.33608E+00	.74857E+00	.57287E+00	.41000E-02	.24958E+01	-.12999E-01	-.29825E+00	-.17420E-01	
.99100E+00	.12700E+01	.33768E+00	.74932E+00	.57079E+00	.36123E-02	.24939E+01	-.11810E-01	-.28716E+00	-.15744E-01	
.99200E+00	.12400E+01	.33929E+00	.74806E+00	.56871E+00	.31441E-02	.24920E+01	-.10596E-01	-.27608E+00	-.14053E-01	
.99300E+00	.12100E+01	.34090E+00	.74790E+00	.56663E+00	.26938E-02	.24902E+01	-.93550E-02	-.26501E+00	-.12349E-01	
.99400E+00	.11800E+01	.34251E+00	.74753E+00	.56455E+00	.22622E-02	.24884E+01	-.80881E-02	-.25395E+00	-.10631E-01	
.99500E+00	.11500E+01	.34413E+00	.74727E+00	.56246E+00	.18490E-02	.24866E+01	-.67950E-02	-.24290E+00	-.89987E-02	
.99600E+00	.11200E+01	.34576E+00	.74701E+00	.56038E+00	.14544E-02	.24848E+01	-.54759E-02	-.23185E+00	-.71533E-02	
.99700E+00	.10900E+01	.34739E+00	.74675E+00	.55829E+00	.10784E-02	.24830E+01	-.41307E-02	-.22081E+00	-.53946E-02	
.99800E+00	.10600E+01	.34903E+00	.74649E+00	.55620E+00	.72103E-03	.24812E+01	-.27594E-02	-.20977E+00	-.36227E-02	
.99900E+00	.10300E+01	.35067E+00	.74622E+00	.55412E+00	.38227E-03	.24794E+01	-.13620E-02	-.19874E+00	-.18378E-02	
.10000E+01	.10000E+01	.35231E+00	.74596E+00	.55203E+00	.62159E-04	.24777E+01	.61326E-04	.18772E+00	-.39913E-04	

THEYAM	R	RHOBAR	DELTA	UBAR	VBAR	SGR1	SGRF	SIGRR	SIGTT	SIGRT
.99000E+00	.13000E+01	.55480E+00	.12973E+01	.97341E-14	.41000E-02	.34530E+01	-.26398E-01	-.17961E+00	.26559E-15	
.99100E+00	.12700E+01	.55785E+00	.12969E+01	.97023E-14	.36128E-02	.34541E+01	-.23896E-01	.19584E+00	.24003E-15	
.99200E+00	.12400E+01	.56090E+00	.12964E+01	.86706E-14	.31441E-02	.34551E+01	-.21363E-01	.21206E+00	.21426E-15	
.99300E+00	.12100E+01	.56395E+00	.12960E+01	.96399E-14	.26938E-02	.34562E+01	-.18797E-01	.24827E+00	.18827E-15	
.99400E+00	.11800E+01	.56701E+00	.12955E+01	.86071E-14	.22622E-02	.34573E+01	-.16159E-01	.24472E+00	.14829E-15	
.99500E+00	.11500E+01	.57007E+00	.12951E+01	.95753E-14	.18490E-02	.34584E+01	-.13564E-01	.26065E+00	.13567E-15	
.99600E+00	.11200E+01	.57314E+00	.12947E+01	.95436E-14	.14544E-02	.34595E+01	-.10907E-01	.27681E+00	.10906E-15	
.99700E+00	.10900E+01	.57622E+00	.12943E+01	.85118E-14	.10784E-02	.34606E+01	-.82125E-02	.29297E+00	.82246E-16	
.99800E+00	.10600E+01	.57929E+00	.12938E+01	.84799E-14	.72103E-03	.34618E+01	-.54866E-02	.30911E+00	.55232E-16	
.99900E+00	.10300E+01	.58236E+00	.12934E+01	.84481E-14	.38227E-03	.34629E+01	-.27289E-02	.32524E+00	.28019E-16	
.10000E+01	.10000E+01	.58547E+00	.12930E+01	.84163E-14	.62159E-04	.34641E+01	.60673E-04	.34134E+00	.60882E-18	

THEYAM	R	RHOBAR	DELTA	UBAR	VBAR	SGR1	SGRF	SIGRR	SIGTT	SIGRT
.99000E+00	.13000E+01	.33608E+00	.74857E+00	.57287E+00	.41000E-02	.24958E+01	-.12999E-01	-.29825E+00	-.17420E-01	
.99100E+00	.12700E+01	.33768E+00	.74832E+00	.57079E+00	.36128E-02	.24939E+01	-.11810E-01	-.28716E+00	-.15744E-01	
.99200E+00	.12400E+01	.33929E+00	.74806E+00	.56871E+00	.31441E-02	.24920E+01	-.10596E-01	-.27608E+00	-.14053E-01	
.99300E+00	.12100E+01	.34090E+00	.74790E+00	.56663E+00	.26938E-02	.24902E+01	-.93550E-02	-.26501E+00	-.12349E-01	
.99400E+00	.11800E+01	.34251E+00	.74753E+00	.56455E+00	.22622E-02	.24884E+01	-.80881E-02	-.25395E+00	-.10631E-01	
.99500E+00	.11500E+01	.34413E+00	.74727E+00	.56246E+00	.18490E-02	.24866E+01	-.67950E-02	-.24290E+00	-.89987E-02	
.99600E+00	.11200E+01	.34576E+00	.74701E+00	.56038E+00	.14544E-02	.24848E+01	-.54759E-02	-.23185E+00	-.71533E-02	
.99700E+00	.10900E+01	.34739E+00	.74675E+00	.55829E+00	.10784E-02	.24830E+01	-.41307E-02	-.22081E+00	-.53946E-02	
.99800E+00	.10600E+01	.34903E+00	.74649E+00	.55620E+00	.72103E-03	.24812E+01	-.27594E-02	-.20977E+00	-.36227E-02	
.99900E+00	.10300E+01	.35067E+00	.74622E+00	.55412E+00	.38227E-03	.24794E+01	-.13620E-02	-.19874E+00	-.18378E-02	
.10000E+01	.10000E+01	.35231E+00	.74596E+00	.55203E+00	.62159E-04	.24777E+01	.61326E-04	.18772E+00	-.39913E-04	

Appendix C

Numerical Results Obtained for  
Model III, Set II

# Set II, Model II — Core

FEE= 0. (φ=0)  
THETA= 0. (θ=0)

R	UBAR (U)	VBAR (V)	WBAR (W)	SIRR (S <sub>rr</sub> )	SIRT (S <sub>tr</sub> )	SIRF (S <sub>rf</sub> )	SITT (S <sub>tt</sub> )	SIFF (S <sub>ff</sub> )	SITF (S <sub>tf</sub> )
0.	0.	0.	0.	.72816E+00	0.	0.	.77948E+00	.81056E+00	0.
.50000E-01	-.19189E+00	0.	0.	.72813E+00	0.	0.	.77918E+00	.81020E+00	0.
.10000E+00	-.38197E+00	0.	0.	.72806E+00	0.	0.	.77828E+00	.80913E+00	0.
.15000E+00	-.56843E+00	0.	0.	.72793E+00	0.	0.	.77679E+00	.80733E+00	0.
.20000E+00	-.74944E+00	0.	0.	.72775E+00	0.	0.	.77470E+00	.80482E+00	0.
.25000E+00	-.92320E+00	0.	0.	.72752E+00	0.	0.	.77201E+00	.80160E+00	0.
.30000E+00	-.10875E+01	0.	0.	.72723E+00	0.	0.	.76872E+00	.79766E+00	0.
.35000E+00	-.12417E+01	0.	0.	.72690E+00	0.	0.	.76484E+00	.79300E+00	0.
.40000E+00	-.13828E+01	0.	0.	.72651E+00	0.	0.	.76036E+00	.78762E+00	0.
.45000E+00	-.15094E+01	0.	0.	.72608E+00	0.	0.	.75528E+00	.78153E+00	0.
.50000E+00	-.16197E+01	0.	0.	.72559E+00	0.	0.	.74960E+00	.77471E+00	0.
.55000E+00	-.17118E+01	0.	0.	.72505E+00	0.	0.	.74333E+00	.76719E+00	0.

THETA= .17453E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.72971E+00	.87753E-02	0.	.77793E+00	.81056E+00	0.
.50000E-01	-.18494E+00	.39421E-01	0.	.72952E+00	.87361E-02	0.	.77748E+00	.81005E+00	0.
.10000E+00	-.36813E+00	.78202E-01	0.	.72897E+00	.86184E-02	0.	.77615E+00	.80853E+00	0.
.15000E+00	-.54785E+00	.11570E+00	0.	.72805E+00	.84222E-02	0.	.77393E+00	.80599E+00	0.
.20000E+00	-.72235E+00	.15127E+00	0.	.72675E+00	.81476E-02	0.	.77083E+00	.80244E+00	0.
.25000E+00	-.89989E+00	.18428E+00	0.	.72509E+00	.77946E-02	0.	.76684E+00	.79787E+00	0.
.30000E+00	-.10487E+01	.21408E+00	0.	.72306E+00	.73630E-02	0.	.76195E+00	.79228E+00	0.
.35000E+00	-.11971E+01	.24004E+00	0.	.72066E+00	.68531E-02	0.	.75619E+00	.78569E+00	0.
.40000E+00	-.13333E+01	.26150E+00	0.	.71790E+00	.62646E-02	0.	.74953E+00	.77807E+00	0.
.45000E+00	-.14556E+01	.27784E+00	0.	.71476E+00	.55977E-02	0.	.74199E+00	.76944E+00	0.
.50000E+00	-.15623E+01	.28840E+00	0.	.71125E+00	.48524E-02	0.	.73356E+00	.75980E+00	0.
.55000E+00	-.16515E+01	.29255E+00	0.	.70738E+00	.40285E-02	0.	.72424E+00	.74914E+00	0.

THETA= .34907E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.73416E+00	.16492E-01	0.	.77347E+00	.81056E+00	0.
.50000E-01	-.16490E+00	.74088E-01	0.	.73352E+00	.16418E-01	0.	.77261E+00	.80962E+00	0.
.10000E+00	-.32828E+00	.14697E+00	0.	.73160E+00	.16197E-01	0.	.77003E+00	.80681E+00	0.
.15000E+00	-.48860E+00	.21744E+00	0.	.72839E+00	.15829E-01	0.	.76572E+00	.80212E+00	0.
.20000E+00	-.64434E+00	.28430E+00	0.	.72389E+00	.15313E-01	0.	.75969E+00	.79556E+00	0.
.25000E+00	-.79397E+00	.34634E+00	0.	.71812E+00	.14649E-01	0.	.75194E+00	.78713E+00	0.
.30000E+00	-.93597E+00	.40235E+00	0.	.71106E+00	.13838E-01	0.	.74247E+00	.77682E+00	0.
.35000E+00	-.10688E+01	.45112E+00	0.	.70271E+00	.12880E-01	0.	.73127E+00	.76464E+00	0.
.40000E+00	-.11909E+01	.49147E+00	0.	.69308E+00	.11774E-01	0.	.71836E+00	.75058E+00	0.
.45000E+00	-.13009E+01	.52217E+00	0.	.68217E+00	.10520E-01	0.	.70372E+00	.73465E+00	0.
.50000E+00	-.13970E+01	.54202E+00	0.	.66907E+00	.91195E-02	0.	.68735E+00	.71684E+00	0.
.55000E+00	-.14780E+01	.54982E+00	0.	.65650E+00	.75712E-02	0.	.66927E+00	.69716E+00	0.

THETA= .52360E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.74099E+00	.22220E-01	0.	.76665E+00	.81056E+00	0.
.50000E-01	-.13421E+00	.99819E-01	0.	.73965E+00	.22120E-01	0.	.76515E+00	.80896E+00	0.
.10000E+00	-.26722E+00	.19801E+00	0.	.73562E+00	.21822E-01	0.	.76064E+00	.80418E+00	0.
.15000E+00	-.39782E+00	.29296E+00	0.	.72891E+00	.21326E-01	0.	.75314E+00	.79620E+00	0.
.20000E+00	-.52483E+00	.38304E+00	0.	.71951E+00	.20631E-01	0.	.74263E+00	.78504E+00	0.
.25000E+00	-.64702E+00	.46662E+00	0.	.70743E+00	.19737E-01	0.	.72913E+00	.77068E+00	0.
.30000E+00	-.76321E+00	.54208E+00	0.	.69266E+00	.18644E-01	0.	.71262E+00	.75313E+00	0.
.35000E+00	-.87220E+00	.60780E+00	0.	.67521E+00	.17353E-01	0.	.69339E+00	.73239E+00	0.
.40000E+00	-.97277E+00	.66215E+00	0.	.65507E+00	.15863E-01	0.	.67060E+00	.70846E+00	0.
.45000E+00	-.10637E+01	.70351E+00	0.	.63224E+00	.14174E-01	0.	.64508E+00	.68135E+00	0.
.50000E+00	-.11439E+01	.73026E+00	0.	.60674E+00	.12287E-01	0.	.61657E+00	.65104E+00	0.

THETA=		R		U8AR		V8AR		W8AR		SIRR		SIRT		SIRF		SITT		SIFF		SITF	
.55000E+00	-.12120E+01	.74077E+00	0.	0.	0.	.74936E+00	.25267E-01	0.	.57854E+00	.10201E-01	0.	.58505E+00	.61754E+00	0.	0.	0.	0.	0.	0.	0.	0.
THETA= .69813E+00																					
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	-.96559E-01	.11351E+00	0.	0.	0.	.74936E+00	.25267E-01	0.	.57854E+00	.10201E-01	0.	.58505E+00	.61754E+00	0.	0.	0.	0.	0.	0.	0.	0.
.10000E+00	-.19232E+00	.22517E+00	0.	0.	0.	.74936E+00	.25267E-01	0.	.57854E+00	.10201E-01	0.	.58505E+00	.61754E+00	0.	0.	0.	0.	0.	0.	0.	0.
.15000E+00	-.28647E+00	.3334E+00	0.	0.	0.	.74936E+00	.25267E-01	0.	.57854E+00	.10201E-01	0.	.58505E+00	.61754E+00	0.	0.	0.	0.	0.	0.	0.	0.
.20000E+00	-.37822E+00	.43557E+00	0.	0.	0.	.74936E+00	.25267E-01	0.	.57854E+00	.10201E-01	0.	.58505E+00	.61754E+00	0.	0.	0.	0.	0.	0.	0.	0.
.25000E+00	-.46677E+00	.53062E+00	0.	0.	0.	.74936E+00	.25267E-01	0.	.57854E+00	.10201E-01	0.	.58505E+00	.61754E+00	0.	0.	0.	0.	0.	0.	0.	0.
.30000E+00	-.55130E+00	.61643E+00	0.	0.	0.	.74936E+00	.25267E-01	0.	.57854E+00	.10201E-01	0.	.58505E+00	.61754E+00	0.	0.	0.	0.	0.	0.	0.	0.
.35000E+00	-.63103E+00	.69116E+00	0.	0.	0.	.74936E+00	.25267E-01	0.	.57854E+00	.10201E-01	0.	.58505E+00	.61754E+00	0.	0.	0.	0.	0.	0.	0.	0.
.40000E+00	-.70515E+00	.75297E+00	0.	0.	0.	.74936E+00	.25267E-01	0.	.57854E+00	.10201E-01	0.	.58505E+00	.61754E+00	0.	0.	0.	0.	0.	0.	0.	0.
.45000E+00	-.77285E+00	.80001E+00	0.	0.	0.	.74936E+00	.25267E-01	0.	.57854E+00	.10201E-01	0.	.58505E+00	.61754E+00	0.	0.	0.	0.	0.	0.	0.	0.
.50000E+00	-.83334E+00	.83642E+00	0.	0.	0.	.74936E+00	.25267E-01	0.	.57854E+00	.10201E-01	0.	.58505E+00	.61754E+00	0.	0.	0.	0.	0.	0.	0.	0.
.55000E+00	-.88582E+00	.84238E+00	0.	0.	0.	.74936E+00	.25267E-01	0.	.57854E+00	.10201E-01	0.	.58505E+00	.61754E+00	0.	0.	0.	0.	0.	0.	0.	0.
THETA= .87266E+00																					
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	-.56492E-01	.11351E+00	0.	0.	0.	.75827E+00	.25267E-01	0.	.75827E+00	.25267E-01	0.	.75827E+00	.81056E+00	0.	0.	0.	0.	0.	0.	0.	0.
.10000E+00	-.11261E+00	.22517E+00	0.	0.	0.	.75827E+00	.25267E-01	0.	.75827E+00	.25267E-01	0.	.75827E+00	.81056E+00	0.	0.	0.	0.	0.	0.	0.	0.
.15000E+00	-.16797E+00	.3334E+00	0.	0.	0.	.75827E+00	.25267E-01	0.	.75827E+00	.25267E-01	0.	.75827E+00	.81056E+00	0.	0.	0.	0.	0.	0.	0.	0.
.20000E+00	-.22221E+00	.43557E+00	0.																		





FEE= .17453E+00

THETA= 0.

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	.72816E+00	0.	0.	.78041E+00	.80962E+00	.53157E-02
.50000E-01	.19189E+00	0.	.72813E+00	0.	0.	.78011E+00	.80927E+00	.53054E-02
.10000E+00	.38197E+00	0.	.72806E+00	0.	0.	.77921E+00	.80820E+00	.52748E-02
.15000E+00	.56843E+00	0.	.72793E+00	0.	0.	.77771E+00	.80641E+00	.52237E-02
.20000E+00	.74944E+00	0.	.72775E+00	0.	0.	.77560E+00	.80392E+00	.51522E-02
.25000E+00	.92320E+00	0.	.72752E+00	0.	0.	.77290E+00	.80071E+00	.50603E-02
.30000E+00	.10879E+01	0.	.72723E+00	0.	0.	.76959E+00	.79678E+00	.49479E-02
.35000E+00	.12417E+01	0.	.72690E+00	0.	0.	.76569E+00	.79215E+00	.48151E-02
.40000E+00	.13828E+01	0.	.72651E+00	0.	0.	.76118E+00	.78680E+00	.46619E-02
.45000E+00	.15094E+01	0.	.72608E+00	0.	0.	.75607E+00	.78073E+00	.44882E-02
.50000E+00	.16197E+01	0.	.72559E+00	0.	0.	.75036E+00	.77396E+00	.42941E-02
.55000E+00	.17118E+01	0.	.72505E+00	0.	0.	.74405E+00	.76647E+00	.40796E-02

THETA= .17453E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	.72974E+00	.99356E-02	.92305E-03	.77884E+00	.80962E+00	.52349E-02
.50000E-01	.40142E-01	.41499E-02	.72955E+00	.98959E-02	.92022E-03	.77839E+00	.80912E+00	.52248E-02
.10000E+00	.79635E-01	.82519E-02	.72900E+00	.87767E-02	.91172E-03	.77706E+00	.80760E+00	.51947E-02
.15000E+00	.11783E+00	.12258E-01	.72808E+00	.85781E-02	.89756E-03	.77483E+00	.80507E+00	.51444E-02
.20000E+00	.15407E+00	.16120E-01	.72678E+00	.83000E-02	.87773E-03	.77171E+00	.80153E+00	.50739E-02
.25000E+00	.18772E+00	.19791E-01	.72512E+00	.79425E-02	.85224E-03	.76770E+00	.79698E+00	.49834E-02
.30000E+00	.21812E+00	.23222E-01	.72309E+00	.75056E-02	.82108E-03	.76281E+00	.79142E+00	.48727E-02
.35000E+00	.24462E+00	.26365E-01	.72069E+00	.69892E-02	.78425E-03	.75702E+00	.78484E+00	.47420E-02
.40000E+00	.26657E+00	.29172E-01	.71793E+00	.63934E-02	.74176E-03	.75034E+00	.7726E+00	.45911E-02
.45000E+00	.28333E+00	.31596E-01	.71479E+00	.57182E-02	.69361E-03	.74277E+00	.76866E+00	.44200E-02
.50000E+00	.29424E+00	.33589E-01	.71120E+00	.49635E-02	.63979E-03	.73431E+00	.75905E+00	.42289E-02
.55000E+00	.29865E+00	.35102E-01	.70741E+00	.41293E-02	.58030E-03	.72495E+00	.74843E+00	.40176E-02

THETA= .34907E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	.73427E+00	.16793E-01	.18131E-02	.77430E+00	.80762E+00	.49951E-02
.50000E-01	.75442E-01	.81737E-02	.73363E+00	.16719E-01	.18125E-02	.77344E+00	.80869E+00	.49855E-02
.10000E+00	.14966E+00	.16253E-01	.73171E+00	.16795E-01	.17957E-02	.77085E+00	.80588E+00	.49577E-02
.15000E+00	.22144E+00	.2443E-01	.72850E+00	.16122E-01	.17678E-02	.76654E+00	.80121E+00	.49087E-02
.20000E+00	.28956E+00	.31751E-01	.72400E+00	.15599E-01	.17288E-02	.76050E+00	.79466E+00	.48415E-02
.25000E+00	.35280E+00	.38980E-01	.71823E+00	.14927E-01	.16786E-02	.75274E+00	.78625E+00	.47551E-02
.30000E+00	.40992E+00	.45737E-01	.71117E+00	.14106E-01	.16172E-02	.74326E+00	.77597E+00	.46495E-02
.35000E+00	.45973E+00	.51928E-01	.70282E+00	.13135E-01	.15447E-02	.73205E+00	.76382E+00	.45247E-02
.40000E+00	.50099E+00	.57458E-01	.69320E+00	.12016E-01	.14610E-02	.71912E+00	.74979E+00	.43807E-02
.45000E+00	.53248E+00	.62232E-01	.68229E+00	.10747E-01	.13661E-02	.70446E+00	.73390E+00	.42176E-02
.50000E+00	.55298E+00	.66157E-01	.67009E+00	.93283E-02	.12601E-02	.68808E+00	.71614E+00	.40352E-02
.55000E+00	.56128E+00	.69137E-01	.65661E+00	.77606E-02	.11430E-02	.66997E+00	.69651E+00	.38336E-02

THETA= .52360E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	.74122E+00	.22626E-01	.26578E-02	.76735E+00	.80962E+00	.46035E-02
.50000E-01	.10164E+00	.11949E-01	.73988E+00	.22523E-01	.26497E-02	.76585E+00	.80803E+00	.45946E-02
.10000E+00	.20164E+00	.23760E-01	.73585E+00	.21723E-01	.26522E-02	.76135E+00	.80325E+00	.45681E-02
.15000E+00	.29835E+00	.35295E-01	.72914E+00	.21270E-01	.25844E-02	.75384E+00	.79529E+00	.45239E-02
.20000E+00	.39012E+00	.46416E-01	.71975E+00	.21016E-01	.25273E-02	.74333E+00	.78414E+00	.44619E-02
.25000E+00	.47532E+00	.56985E-01	.70766E+00	.20111E-01	.24539E-02	.72982E+00	.76981E+00	.43823E-02
.30000E+00	.55229E+00	.66864E-01	.69290E+00	.19005E-01	.23642E-02	.71331E+00	.75230E+00	.42850E-02
.35000E+00	.61939E+00	.75914E-01	.67545E+00	.17697E-01	.22582E-02	.69380E+00	.73160E+00	.41700E-02
.40000E+00	.67498E+00	.83998E-01	.65531E+00	.16189E-01	.21358E-02	.67128E+00	.70771E+00	.40373E-02
.45000E+00	.71741E+00	.90978E-01	.63249E+00	.14479E-01	.19972E-02	.64577E+00	.68065E+00	.38869E-02
.50000E+00	.74503E+00	.96715E-01	.60698E+00	.12568E-01	.18422E-02	.61725E+00	.65039E+00	.37188E-02





THETA= .55000E+00 .88779E-01 .56128E+00 .18995E+00 .20847E+00 .77606E-02 .31403E-02 .18483E+00 .23837E+00 .13953E-02

U	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	.35976E-01	.40142E-01	.23535E-01	.77884E+00	.89356E-02	.52349E-02	.72974E+00	.80962E+00	.92305E-03	
.10000E+00	.71361E-01	.79635E-01	.46799E-01	.77370E+00	.88959E-02	.52188E-02	.72478E+00	.80447E+00	.92128E-03	
.15000E+00	.10557E+00	.11783E+00	.69518E-01	.75830E+00	.87767E-02	.51704E-02	.70991E+00	.78902E+00	.91596E-03	
.20000E+00	.13800E+00	.15407E+00	.91422E-01	.73263E+00	.85781E-02	.50903E-02	.68512E+00	.76327E+00	.90709E-03	
.25000E+00	.16807E+00	.18772E+00	.11224E+00	.69670E+00	.83000E-02	.49779E-02	.65041E+00	.72722E+00	.89467E-03	
.30000E+00	.19519E+00	.21812E+00	.13170E+00	.65050E+00	.79425E-02	.48333E-02	.60579E+00	.68087E+00	.87871E-03	
.35000E+00	.21876E+00	.24462E+00	.14952E+00	.59403E+00	.75056E-02	.46566E-02	.55126E+00	.62421E+00	.85920E-03	
.40000E+00	.23821E+00	.26657E+00	.16544E+00	.52729E+00	.69829E-02	.44477E-02	.48680E+00	.55726E+00	.83614E-03	
.45000E+00	.25292E+00	.28333E+00	.17919E+00	.45029E+00	.63934E-02	.42068E-02	.41244E+00	.48001E+00	.80953E-03	
.50000E+00	.26233E+00	.29424E+00	.19049E+00	.36302E+00	.57182E-02	.39336E-02	.37815E+00	.39245E+00	.77937E-03	
.55000E+00	.26582E+00	.29865E+00	.19907E+00	.26548E+00	.49635E-02	.36284E-02	.23396E+00	.29460E+00	.74567E-03	
THETA= .15708E+01				.15767E+00	.41293E-02	.32911E-02	.12984E+00	.18644E+00	.70842E-03	

U	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	.43061E-01	.62690E-01	.23898E-01	.78041E+00	.13955E-14	.53157E-02	.72816E+00	.80962E+00	.14196E-15	
.10000E+00	.85456E-01	.12437E-13	.47521E-01	.77512E+00	.13893E-14	.52993E-02	.72306E+00	.80432E+00	.14169E-15	
.15000E+00	.12652E+00	.18401E-13	.70591E-01	.75924E+00	.13707E-14	.52504E-02	.70775E+00	.78842E+00	.14087E-15	
.20000E+00	.16559E+00	.24061E-13	.92833E-01	.73278E+00	.13396E-14	.51688E-02	.68224E+00	.76193E+00	.13951E-15	
.25000E+00	.20200E+00	.29316E-13	.11397E+00	.69573E+00	.12962E-14	.50547E-02	.64652E+00	.72483E+00	.13760E-15	
.30000E+00	.23508E+00	.34063E-13	.13373E+00	.64810E+00	.12404E-14	.49078E-02	.60060E+00	.67714E+00	.13514E-15	
.35000E+00	.26417E+00	.38202E-13	.15183E+00	.58989E+00	.11721E-14	.47284E-02	.54447E+00	.61885E+00	.13214E-15	
.40000E+00	.28860E+00	.41630E-13	.16800E+00	.52109E+00	.10915E-14	.45183E-02	.47813E+00	.54996E+00	.12860E-15	
.45000E+00	.30772E+00	.44247E-13	.18196E+00	.44170E+00	.99845E-15	.42716E-02	.40159E+00	.47047E+00	.12450E-15	
.50000E+00	.32084E+00	.45951E-13	.19343E+00	.35173E+00	.89300E-15	.39943E-02	.31485E+00	.38038E+00	.11987E-15	
.55000E+00	.32731E+00	.46640E-13	.20214E+00	.25117E+00	.77514E-15	.36844E-02	.21790E+00	.27969E+00	.11468E-15	
THETA= .17453E+01				.14003E+00	.64487E-15	.33418E-02	.11075E+00	.16841E+00	.10895E-15	

U	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	.35976E-01	.40142E-01	.23535E-01	.77884E+00	.89356E-02	.52349E-02	.72974E+00	.80962E+00	.92305E-03	
.10000E+00	.71361E-01	.79635E-01	.46799E-01	.77370E+00	.88959E-02	.52188E-02	.72478E+00	.80447E+00	.92128E-03	
.15000E+00	.10557E+00	.11783E+00	.69518E-01	.75830E+00	.87767E-02	.51704E-02	.70991E+00	.78902E+00	.91596E-03	
.20000E+00	.13800E+00	.15407E+00	.91422E-01	.73263E+00	.85781E-02	.50903E-02	.68512E+00	.76327E+00	.90709E-03	
.25000E+00	.16807E+00	.18772E+00	.11224E+00	.69670E+00	.83000E-02	.49779E-02	.65041E+00	.72722E+00	.89467E-03	
.30000E+00	.19519E+00	.21812E+00	.13170E+00	.65050E+00	.79425E-02	.48333E-02	.60579E+00	.68087E+00	.87871E-03	
.35000E+00	.21876E+00	.24462E+00	.14952E+00	.59403E+00	.75056E-02	.46566E-02	.55126E+00	.62421E+00	.85920E-03	
.40000E+00	.23821E+00	.26657E+00	.16544E+00	.52729E+00	.69829E-02	.44477E-02	.48680E+00	.55726E+00	.83614E-03	
.45000E+00	.25292E+00	.28333E+00	.17919E+00	.45029E+00	.63934E-02	.42068E-02	.41244E+00	.48001E+00	.80953E-03	
.50000E+00	.26233E+00	.29424E+00	.19049E+00	.36302E+00	.57182E-02	.39336E-02	.37815E+00	.39245E+00	.77937E-03	
.55000E+00	.26582E+00	.29865E+00	.19907E+00	.26548E+00	.49635E-02	.36284E-02	.23396E+00	.29460E+00	.74567E-03	
THETA= .19199E+01				.15767E+00	.41293E-02	.32911E-02	.12984E+00	.18644E+00	.70842E-03	

U	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	.15576E-01	.75442E-01	.22457E-01	.77430E+00	.16793E-01	.49951E-02	.73427E+00	.80962E+00	.18181E-02	
.10000E+00	.30777E-01	.14966E+00	.44655E-01	.76962E+00	.16719E-01	.49798E-02	.72973E+00	.80490E+00	.18146E-02	
.15000E+00	.45228E-01	.22144E+00	.66234E-01	.75560E+00	.16495E-01	.49338E-02	.71611E+00	.79074E+00	.18041E-02	
.20000E+00	.58552E-01	.28956E+00	.87234E-01	.73221E+00	.16122E-01	.48571E-02	.69341E+00	.76713E+00	.17866E-02	
.25000E+00	.70376E-01	.35280E+00	.10710E+00	.69948E+00	.15599E-01	.47498E-02	.66162E+00	.73408E+00	.17622E-02	
.30000E+00	.80323E-01	.40992E+00	.12566E+00	.65739E+00	.14927E-01	.46119E-02	.62075E+00	.69159E+00	.17307E-02	
.35000E+00	.88019E-01	.45973E+00	.14267E+00	.60595E+00	.14106E-01	.44432E-02	.57080E+00	.63966E+00	.16923E-02	
.40000E+00	.93087E-01	.50099E+00	.15786E+00	.54516E+00	.13135E-01	.42440E-02	.51177E+00	.57829E+00	.16469E-02	
.45000E+00	.95154E-01	.53248E+00	.17098E+00	.47502E+00	.12016E-01	.40140E-02	.44366E+00	.50747E+00	.15945E-02	
.50000E+00	.93843E-01	.55298E+00	.18176E+00	.39552E+00	.10747E-01	.37534E-02	.36646E+00	.42721E+00	.15351E-02	
THETA= .20847E+00				.30667E+00	.93283E-02	.34622E-02	.28019E+00	.33751E+00	.14687E-02	

THETA= .88779E-01 .56128E+00 .18995E+00 .20847E+00 .77606E-02 .31403E-02 .18493E+00 .23837E+00 .13953E-02

FEE= .34907E+00

THETA= 0.

U8AR	V8AR	W8AR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	.72814E+00	0.	0.	.78311E+00	.80692E+00	.99902E-02
.50000E-01	-.19189E+00	0.	.72813E+00	0.	0.	.78281E+00	.80657E+00	.99710E-02
.10000E+00	-.38197E+00	0.	.72806E+00	0.	0.	.78189E+00	.80552E+00	.99134E-02
.15000E+00	-.56843E+00	0.	.72793E+00	0.	0.	.78036E+00	.80376E+00	.98174E-02
.20000E+00	-.74944E+00	0.	.72775E+00	0.	0.	.77822E+00	.80130E+00	.96830E-02
.25000E+00	-.92320E+00	0.	.72752E+00	0.	0.	.77547E+00	.79814E+00	.95102E-02
.30000E+00	-.10879E+01	0.	.72723E+00	0.	0.	.77211E+00	.79427E+00	.92990E-02
.35000E+00	-.12417E+01	0.	.72690E+00	0.	0.	.76813E+00	.78970E+00	.90495E-02
.40000E+00	-.13828E+01	0.	.72651E+00	0.	0.	.76355E+00	.78443E+00	.87615E-02
.45000E+00	-.15094E+01	0.	.72608E+00	0.	0.	.75835E+00	.77845E+00	.84351E-02
.50000E+00	-.16197E+01	0.	.72559E+00	0.	0.	.75254E+00	.77178E+00	.80703E-02
.55000E+00	-.17118E+01	0.	.72505E+00	0.	0.	.74612E+00	.76440E+00	.76672E-02

THETA= .17453E+00

U8AR	V8AR	W8AR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	.72982E+00	.93971E-02	.17348E-02	.73145E+00	.80692E+00	.98384E-02
.50000E-01	-.18444E+00	.7793E-02	.72963E+00	.93560E-02	.17295E-02	.73100E+00	.80642E+00	.98195E-02
.10000E+00	-.36715E+00	.15508E-01	.72908E+00	.92326E-02	.17135E-02	.72965E+00	.80492E+00	.97628E-02
.15000E+00	-.54638E+00	.23037E-01	.72816E+00	.90269E-02	.16869E-02	.72740E+00	.80242E+00	.96682E-02
.20000E+00	-.72041E+00	.30296E-01	.72687E+00	.87389E-02	.16496E-02	.72426E+00	.79892E+00	.95359E-02
.25000E+00	-.88749E+00	.37194E-01	.72521E+00	.83687E-02	.16017E-02	.72021E+00	.79442E+00	.93657E-02
.30000E+00	-.10459E+01	.43642E-01	.72318E+00	.79162E-02	.15431E-02	.71526E+00	.78892E+00	.91578E-02
.35000E+00	-.11939E+01	.49549E-01	.72078E+00	.73814E-02	.14739E-02	.70941E+00	.78242E+00	.89120E-02
.40000E+00	-.13297E+01	.54826E-01	.71801E+00	.67643E-02	.13941E-02	.70526E+00	.77492E+00	.86284E-02
.45000E+00	-.14516E+01	.59381E-01	.71487E+00	.60650E-02	.13036E-02	.70501E+00	.76641E+00	.83070E-02
.50000E+00	-.15579E+01	.63126E-01	.71137E+00	.52834E-02	.12024E-02	.70366E+00	.75691E+00	.79477E-02
.55000E+00	-.16468E+01	.65970E-01	.70749E+00	.44195E-02	.10506E-02	.72701E+00	.74641E+00	.75507E-02

THETA= .34907E+00

U8AR	V8AR	W8AR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	.73459E+00	.17661E-01	.34168E-02	.77668E+00	.80692E+00	.93877E-02
.50000E-01	-.16299E+00	.15362E-01	.73395E+00	.17583E-01	.34064E-02	.77582E+00	.80599E+00	.93696E-02
.10000E+00	-.32446E+00	.30546E-01	.73202E+00	.17352E-01	.33749E-02	.77322E+00	.80321E+00	.93155E-02
.15000E+00	-.48291E+00	.45375E-01	.72881E+00	.16965E-01	.33225E-02	.76890E+00	.79857E+00	.92253E-02
.20000E+00	-.63682E+00	.59672E-01	.72432E+00	.16424E-01	.32491E-02	.76284E+00	.79207E+00	.90990E-02
.25000E+00	-.78467E+00	.73259E-01	.71855E+00	.15728E-01	.31547E-02	.75555E+00	.78372E+00	.89367E-02
.30000E+00	-.92495E+00	.85958E-01	.71149E+00	.14878E-01	.30394E-02	.74553E+00	.77351E+00	.87382E-02
.35000E+00	-.10561E+01	.97593E-01	.70315E+00	.13872E-01	.29030E-02	.73428E+00	.76144E+00	.85037E-02
.40000E+00	-.11767E+01	.10799E+00	.69352E+00	.12713E-01	.27458E-02	.72130E+00	.74752E+00	.82331E-02
.45000E+00	-.12852E+01	.11696E+00	.68262E+00	.11398E-01	.25675E-02	.70659E+00	.73174E+00	.79264E-02
.50000E+00	-.13801E+01	.12433E+00	.67042E+00	.99295E-02	.23683E-02	.69015E+00	.71411E+00	.75836E-02
.55000E+00	-.14598E+01	.12994E+00	.65695E+00	.83059E-02	.21481E-02	.67198E+00	.69462E+00	.72048E-02

THETA= .52360E+00

U8AR	V8AR	W8AR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	.74190E+00	.23794E-01	.49951E-02	.76937E+00	.80692E+00	.86517E-02
.50000E-01	-.13012E+00	.22457E-01	.74056E+00	.23690E-01	.49798E-02	.76787E+00	.80534E+00	.86351E-02
.10000E+00	-.25907E+00	.44655E-01	.73653E+00	.23378E-01	.49338E-02	.76337E+00	.80059E+00	.85852E-02
.15000E+00	-.38567E+00	.66334E-01	.72982E+00	.22857E-01	.48571E-02	.75586E+00	.79267E+00	.85021E-02
.20000E+00	-.50875E+00	.87234E-01	.72043E+00	.22128E-01	.47498E-02	.74535E+00	.78158E+00	.83857E-02
.25000E+00	-.62714E+00	.10710E+00	.70835E+00	.21190E-01	.46119E-02	.73183E+00	.76733E+00	.82361E-02
.30000E+00	-.73966E+00	.12565E+00	.69359E+00	.20044E-01	.44432E-02	.71531E+00	.74990E+00	.80532E-02
.35000E+00	-.84515E+00	.14267E+00	.67614E+00	.18690E-01	.42440E-02	.69576E+00	.72931E+00	.78371E-02
.40000E+00	-.94242E+00	.15786E+00	.65601E+00	.17128E-01	.40140E-02	.67327E+00	.70555E+00	.75877E-02
.45000E+00	-.10303E+01	.17098E+00	.63320E+00	.15357E-01	.37534E-02	.64774E+00	.67863E+00	.73050E-02
.50000E+00	-.11076E+01	.18176E+00	.60770E+00	.13378E-01	.34622E-02	.61920E+00	.64853E+00	.69891E-02

THETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	0.	.11732E+01	.80065E+00	.18995E+00	.57951E+00	.11190E-01	.31403E-02	.58767E+00	.61527E+00	.66400E-02
THETA=	.69813E+00									
.50000E-01	0.	.89799E-01	.12156E+00	.28870E-01	.75087E+00	.27058E-01	.64216E-02	.76041E+00	.80692E+00	.76529E-02
.10000E+00	0.	.17884E+00	.24118E+00	.57407E-01	.74866E+00	.26939E-01	.64018E-02	.75812E+00	.80453E+00	.76382E-02
.15000E+00	0.	.26638E+00	.35692E+00	.85277E-01	.74206E+00	.26584E-01	.63427E-02	.75128E+00	.79737E+00	.75941E-02
.20000E+00	0.	.35165E+00	.46684E+00	.11215E+00	.73105E+00	.25992E-01	.62442E-02	.73987E+00	.78543E+00	.75206E-02
.25000E+00	0.	.43390E+00	.56901E+00	.13768E+00	.71565E+00	.25163E-01	.61063E-02	.72389E+00	.76871E+00	.74176E-02
.30000E+00	0.	.51237E+00	.66147E+00	.16155E+00	.69584E+00	.24097E-01	.59289E-02	.70335E+00	.74722E+00	.72852E-02
.35000E+00	0.	.58632E+00	.74230E+00	.18342E+00	.67162E+00	.22794E-01	.57121E-02	.67824E+00	.72094E+00	.71235E-02
.40000E+00	0.	.65498E+00	.80956E+00	.20295E+00	.64301E+00	.21254E-01	.54559E-02	.64857E+00	.68990E+00	.69323E-02
.45000E+00	0.	.71760E+00	.86129E+00	.21981E+00	.60999E+00	.19477E-01	.51603E-02	.61434E+00	.65407E+00	.67117E-02
.50000E+00	0.	.77343E+00	.89558E+00	.23367E+00	.57257E+00	.17463E-01	.48253E-02	.57554E+00	.61347E+00	.64617E-02
.55000E+00	0.	.82171E+00	.91046E+00	.24420E+00	.53075E+00	.15213E-01	.44509E-02	.53217E+00	.56809E+00	.61822E-02
THETA=	.87266E+00									
.50000E-01	0.	.46891E-01	.11156E+00	.34406E-01	.75041E+00	.27058E-01	.76529E-02	.75087E+00	.80692E+00	.64216E-02
.10000E+00	0.	.93473E-01	.24118E+00	.68415E-01	.75729E+00	.26939E-01	.76294E-02	.74775E+00	.80368E+00	.64092E-02
.15000E+00	0.	.13943E+00	.35692E+00	.10163E+00	.74795E+00	.26584E-01	.75590E-02	.73841E+00	.79395E+00	.63722E-02
.20000E+00	0.	.18447E+00	.46684E+00	.13365E+00	.73237E+00	.25992E-01	.74415E-02	.72285E+00	.77722E+00	.63105E-02
.25000E+00	0.	.22826E+00	.56901E+00	.16408E+00	.71056E+00	.25163E-01	.72771E-02	.70106E+00	.75501E+00	.62241E-02
.30000E+00	0.	.27050E+00	.66147E+00	.19253E+00	.68252E+00	.24097E-01	.70658E-02	.67304E+00	.72581E+00	.61130E-02
.35000E+00	0.	.31088E+00	.74230E+00	.21853E+00	.64825E+00	.22794E-01	.68074E-02	.63880E+00	.69013E+00	.59773E-02
.40000E+00	0.	.34910E+00	.80956E+00	.24186E+00	.60775E+00	.21254E-01	.65021E-02	.59833E+00	.64795E+00	.58169E-02
.45000E+00	0.	.38483E+00	.86129E+00	.26196E+00	.56102E+00	.19477E-01	.61499E-02	.55163E+00	.59929E+00	.56318E-02
.50000E+00	0.	.41778E+00	.89558E+00	.27848E+00	.50806E+00	.17463E-01	.57506E-02	.49871E+00	.54413E+00	.54220E-02
.55000E+00	0.	.44762E+00	.91046E+00	.29102E+00	.44886E+00	.15213E-01	.53044E-02	.43956E+00	.48249E+00	.51875E-02
THETA=	.10472E+01									
.50000E-01	0.	.65708E-02	.10690E+00	.38897E-01	.76937E+00	.23794E-01	.86517E-02	.74190E+00	.80692E+00	.49951E-02
.10000E+00	0.	.13250E-01	.21209E+00	.77344E-01	.76540E+00	.23690E-01	.86252E-02	.73800E+00	.80287E+00	.49855E-02
.15000E+00	0.	.20145E-01	.31387E+00	.11489E+00	.75348E+00	.23378E-01	.85455E-02	.72632E+00	.79073E+00	.49567E-02
.20000E+00	0.	.27366E-01	.41053E+00	.15109E+00	.73360E+00	.22857E-01	.84128E-02	.70685E+00	.77048E+00	.49087E-02
.25000E+00	0.	.35019E-01	.50038E+00	.18550E+00	.70578E+00	.22129E-01	.82269E-02	.67960E+00	.74214E+00	.48415E-02
.30000E+00	0.	.43214E-01	.58169E+00	.21765E+00	.67001E+00	.21190E-01	.79880E-02	.64456E+00	.70570E+00	.47551E-02
.35000E+00	0.	.52058E-01	.65277E+00	.24711E+00	.62629E+00	.20044E-01	.76959E-02	.60173E+00	.66117E+00	.46495E-02
.40000E+00	0.	.61660E-01	.71191E+00	.27343E+00	.57462E+00	.18690E-01	.73508E-02	.55111E+00	.60853E+00	.45247E-02
.45000E+00	0.	.72128E-01	.75741E+00	.29615E+00	.51500E+00	.17128E-01	.69525E-02	.49270E+00	.54780E+00	.43807E-02
.50000E+00	0.	.83570E-01	.78756E+00	.31483E+00	.44743E+00	.15357E-01	.65012E-02	.42651E+00	.47897E+00	.42176E-02
.55000E+00	0.	.96095E-01	.80065E+00	.32901E+00	.37192E+00	.13378E-01	.59967E-02	.35253E+00	.40205E+00	.40352E-02
THETA=	.12217E+01									
.50000E-01	0.	.26299E-01	.79342E-01	.42206E-01	.77668E+00	.17661E-01	.93877E-02	.73459E+00	.80692E+00	.34168E-02
.10000E+00	0.	.52148E-01	.15742E+00	.83924E-01	.77201E+00	.17583E-01	.93589E-02	.73006E+00	.80222E+00	.34103E-02
.15000E+00	0.	.77100E-01	.23296E+00	.12467E+00	.75798E+00	.17352E-01	.92725E-02	.71647E+00	.78810E+00	.33906E-02
.20000E+00	0.	.10070E+00	.30471E+00	.16395E+00	.73461E+00	.16965E-01	.91284E-02	.69382E+00	.76458E+00	.33577E-02
.25000E+00	0.	.12251E+00	.37139E+00	.20128E+00	.70188E+00	.16424E-01	.89267E-02	.66211E+00	.73165E+00	.33118E-02
.30000E+00	0.	.14207E+00	.43175E+00	.23617E+00	.65981E+00	.15728E-01	.86675E-02	.62134E+00	.68931E+00	.32527E-02
.35000E+00	0.	.15894E+00	.48450E+00	.26813E+00	.60839E+00	.14878E-01	.83506E-02	.57151E+00	.63756E+00	.31805E-02
.40000E+00	0.	.17266E+00	.52840E+00	.29669E+00	.47749E+00	.13872E-01	.79761E-02	.51262E+00	.57640E+00	.30951E-02
.45000E+00	0.	.18279E+00	.56217E+00	.32134E+00	.44749E+00	.12713E-01	.75439E-02	.44467E+00	.50583E+00	.29966E-02
.50000E+00	0.	.18888E+00	.58455E+00	.34161E+00	.39801E+00	.11394E-01	.70542E-02	.36765E+00	.42586E+00	.28850E-02
.55000E+00	0.				.30919E+00	.97295E-02	.65068E-02	.28158E+00	.33647E+00	.27602E-02



.55000E+00	.19047E+00	.59426E+00	.35699E+00	.21102E+00	.83059E-02	.59018E-02	.18645E+00	.23768E+00	.26223E-02
THETA=	UBAR	VBAR	WBAR	SIR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.78145E+00	.93971E-02	.98384E-02	.72982E+00	.80692E+00	.17348E-02
.50000E-01	.47753E-01	.42217E-01	.44232E-01	.77632E+00	.93560E-02	.98082E-02	.72487E+00	.80179E+00	.17348E-02
.10000E+00	.94834E-01	.83760E-01	.87953E-01	.76093E+00	.92326E-02	.97176E-02	.71004E+00	.78639E+00	.17214E-02
.15000E+00	.14057E+00	.12396E+00	.13065E+00	.73527E+00	.90269E-02	.95667E-02	.68531E+00	.76073E+00	.17048E-02
.20000E+00	.18429E+00	.16213E+00	.17182E+00	.69934E+00	.87389E-02	.93553E-02	.65069E+00	.72480E+00	.16814E-02
.25000E+00	.22533E+00	.19761E+00	.21094E+00	.65315E+00	.83687E-02	.90836E-02	.60618E+00	.67861E+00	.16514E-02
.30000E+00	.26301E+00	.22973E+00	.24751E+00	.59670E+00	.79162E-02	.87515E-02	.55178E+00	.62215E+00	.16148E-02
.35000E+00	.29666E+00	.25780E+00	.28101E+00	.52998E+00	.73814E-02	.83590E-02	.48749E+00	.55543E+00	.15714E-02
.40000E+00	.32560E+00	.28116E+00	.31093E+00	.45300E+00	.67643E-02	.79061E-02	.41331E+00	.47844E+00	.15214E-02
.45000E+00	.34918E+00	.29912E+00	.33677E+00	.36576E+00	.60650E-02	.73928E-02	.32924E+00	.39119E+00	.14647E-02
.50000E+00	.36670E+00	.31103E+00	.35801E+00	.26825E+00	.52834E-02	.68192E-02	.23528E+00	.29367E+00	.14014E-02
.55000E+00	.37752E+00	.31620E+00	.37413E+00	.16047E+00	.44195E-02	.61852E-02	.13142E+00	.18589E+00	.13314E-02
THETA=	UBAR	VBAR	WBAR	SIR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.78311E+00	.14675E-14	.99902E-02	.72816E+00	.80692E+00	.26680E-15
.50000E-01	.55204E-01	.65930E-14	.44914E-01	.77782E+00	.14611E-14	.99595E-02	.72307E+00	.80164E+00	.26629E-15
.10000E+00	.10966E+00	.13081E-13	.89310E-01	.76195E+00	.14418E-14	.98675E-02	.70780E+00	.78580E+00	.26475E-15
.15000E+00	.16262E+00	.19358E-13	.13267E+00	.73549E+00	.14097E-14	.97142E-02	.68235E+00	.75939E+00	.26219E-15
.20000E+00	.21333E+00	.25320E-13	.17447E+00	.69846E+00	.13648E-14	.94996E-02	.64673E+00	.72242E+00	.25860E-15
.25000E+00	.26104E+00	.30861E-13	.21419E+00	.65084E+00	.13069E-14	.92237E-02	.60092E+00	.67489E+00	.25399E-15
.30000E+00	.30501E+00	.35874E-13	.25133E+00	.59264E+00	.12363E-14	.88865E-02	.54493E+00	.61680E+00	.24835E-15
.35000E+00	.34449E+00	.40260E-13	.28534E+00	.52386E+00	.11527E-14	.84879E-02	.47872E+00	.54815E+00	.24168E-15
.40000E+00	.37872E+00	.43908E-13	.31573E+00	.44450E+00	.10564E-14	.80281E-02	.40242E+00	.46893E+00	.23399E-15
.45000E+00	.40696E+00	.46714E-13	.34196E+00	.35455E+00	.94716E-15	.75069E-02	.31590E+00	.37915E+00	.22527E-15
.50000E+00	.42846E+00	.48574E-13	.36353E+00	.25403E+00	.82510E-15	.69244E-02	.21919E+00	.27881E+00	.21553E-15
.55000E+00	.44248E+00	.49381E-13	.37991E+00	.14292E+00	.69019E-15	.62806E-02	.11231E+00	.16790E+00	.20476E-15
THETA=	UBAR	VBAR	WBAR	SIR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.78145E+00	.93971E-02	.98384E-02	.72982E+00	.80692E+00	.17348E-02
.50000E-01	.47753E-01	.42217E-01	.44232E-01	.77632E+00	.93560E-02	.98082E-02	.72487E+00	.80179E+00	.17348E-02
.10000E+00	.94834E-01	.83760E-01	.87953E-01	.76093E+00	.92326E-02	.97176E-02	.71004E+00	.78639E+00	.17214E-02
.15000E+00	.14057E+00	.12396E+00	.13065E+00	.73527E+00	.90269E-02	.95667E-02	.68531E+00	.76073E+00	.17048E-02
.20000E+00	.18429E+00	.16213E+00	.17182E+00	.69934E+00	.87389E-02	.93553E-02	.65069E+00	.72480E+00	.16814E-02
.25000E+00	.22533E+00	.19761E+00	.21094E+00	.65315E+00	.83687E-02	.90836E-02	.60618E+00	.67861E+00	.16514E-02
.30000E+00	.26301E+00	.22973E+00	.24751E+00	.59670E+00	.79162E-02	.87515E-02	.55178E+00	.62215E+00	.16148E-02
.35000E+00	.29666E+00	.25780E+00	.28101E+00	.52998E+00	.73814E-02	.83590E-02	.48749E+00	.55543E+00	.15714E-02
.40000E+00	.32560E+00	.28116E+00	.31093E+00	.45300E+00	.67643E-02	.79061E-02	.41331E+00	.47844E+00	.15214E-02
.45000E+00	.34918E+00	.29912E+00	.33677E+00	.36576E+00	.60650E-02	.73928E-02	.32924E+00	.39119E+00	.14647E-02
.50000E+00	.36670E+00	.31103E+00	.35801E+00	.26825E+00	.52834E-02	.68192E-02	.23528E+00	.29367E+00	.14014E-02
.55000E+00	.37752E+00	.31620E+00	.37413E+00	.16047E+00	.44195E-02	.61852E-02	.13142E+00	.18589E+00	.13314E-02
THETA=	UBAR	VBAR	WBAR	SIR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.77668E+00	.17661E-01	.93877E-02	.73459E+00	.80692E+00	.34168E-02
.50000E-01	.26299E-01	.79342E-01	.42206E-01	.77201E+00	.17583E-01	.93589E-02	.73006E+00	.80222E+00	.34103E-02
.10000E+00	.52148E-01	.15742E+00	.83924E-01	.75798E+00	.17352E-01	.92725E-02	.71647E+00	.78810E+00	.33906E-02
.15000E+00	.77100E-01	.23296E+00	.12467E+00	.73461E+00	.16965E-01	.91284E-02	.69382E+00	.76458E+00	.33577E-02
.20000E+00	.10070E+00	.30471E+00	.16395E+00	.70188E+00	.16424E-01	.89267E-02	.66211E+00	.73165E+00	.33118E-02
.25000E+00	.12251E+00	.37139E+00	.20128E+00	.65981E+00	.15728E-01	.86675E-02	.62134E+00	.68931E+00	.32527E-02
.30000E+00	.14207E+00	.43175E+00	.23617E+00	.60839E+00	.14878E-01	.83506E-02	.57151E+00	.63756E+00	.31805E-02
.35000E+00	.15894E+00	.48450E+00	.26813E+00	.54761E+00	.13872E-01	.79761E-02	.51262E+00	.57640E+00	.30951E-02
.40000E+00	.17266E+00	.52840E+00	.29669E+00	.47749E+00	.12713E-01	.75439E-02	.44467E+00	.50583E+00	.29966E-02
.45000E+00	.18279E+00	.56217E+00	.32134E+00	.39801E+00	.11398E-01	.70542E-02	.36765E+00	.42586E+00	.28850E-02
.50000E+00	.18888E+00	.58455E+00	.34161E+00	.30919E+00	.99295E-02	.65068E-02	.28158E+00	.33647E+00	.27602E-02
.55000E+00	.19047E+00	.59426E+00	.35699E+00	.21102E+00	.83059E-02	.59018E-02	.18645E+00	.23768E+00	.26223E-02

FEE= .52360E+00

THETA= 0.

0.	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.72816E+00	0.	0.	.78725E+00	.80279E+00	.13460E-01
.50000E-01	-.19189E+00	0.	0.	.72813E+00	0.	0.	.78693E+00	.80244E+00	.13434E-01
.10000E+00	-.38197E+00	0.	0.	.72806E+00	0.	0.	.78599E+00	.80141E+00	.13356E-01
.15000E+00	-.56843E+00	0.	0.	.72793E+00	0.	0.	.78442E+00	.79970E+00	.13227E-01
.20000E+00	-.74944E+00	0.	0.	.72775E+00	0.	0.	.78223E+00	.79729E+00	.13046E-01
.25000E+00	-.92320E+00	0.	0.	.72752E+00	0.	0.	.77941E+00	.79420E+00	.12813E-01
.30000E+00	-.10879E+01	0.	0.	.72723E+00	0.	0.	.77596E+00	.79042E+00	.12529E-01
.35000E+00	-.12417E+01	0.	0.	.72690E+00	0.	0.	.77188E+00	.78596E+00	.12192E-01
.40000E+00	-.13828E+01	0.	0.	.72651E+00	0.	0.	.76717E+00	.78080E+00	.11804E-01
.45000E+00	-.15094E+01	0.	0.	.72608E+00	0.	0.	.76184E+00	.77496E+00	.11365E-01
.50000E+00	-.16197E+01	0.	0.	.72559E+00	0.	0.	.75588E+00	.76844E+00	.10873E-01
.55000E+00	-.17118E+01	0.	0.	.72505E+00	0.	0.	.74930E+00	.76122E+00	.10330E-01

THETA= .17453E+00

0.	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.72994E+00	.10104E-01	.23373E-02	.78546E+00	.80279E+00	.13255E-01
.50000E-01	-.18388E+00	.45396E-01	.10508E-01	.72976E+00	.10061E-01	.23301E-02	.78501E+00	.80230E+00	.13230E-01
.10000E+00	-.36603E+00	.90082E-01	.20894E-01	.72920E+00	.99310E-02	.23086E-02	.78364E+00	.80082E+00	.13153E-01
.15000E+00	-.54472E+00	.13335E+00	.31038E-01	.72828E+00	.97144E-02	.22727E-02	.78135E+00	.79836E+00	.13026E-01
.20000E+00	-.71820E+00	.17448E+00	.40818E-01	.72699E+00	.94113E-02	.22225E-02	.77815E+00	.79492E+00	.12848E-01
.25000E+00	-.88476E+00	.21277E+00	.50112E-01	.72533E+00	.90215E-02	.21579E-02	.77404E+00	.79050E+00	.12618E-01
.30000E+00	-.10427E+01	.24752E+00	.58799E-01	.72330E+00	.85451E-02	.20790E-02	.76901E+00	.78509E+00	.12338E-01
.35000E+00	-.11901E+01	.27800E+00	.66758E-01	.72091E+00	.79871E-02	.19858E-02	.76307E+00	.77870E+00	.12007E-01
.40000E+00	-.13255E+01	.30350E+00	.73867E-01	.71814E+00	.73325E-02	.18782E-02	.75621E+00	.77133E+00	.11625E-01
.45000E+00	-.14470E+01	.32333E+00	.80004E-01	.71500E+00	.65963E-02	.17563E-02	.74844E+00	.76297E+00	.11192E-01
.50000E+00	-.15529E+01	.33676E+00	.85050E-01	.71150E+00	.57735E-02	.16200E-02	.73976E+00	.75363E+00	.10708E-01
.55000E+00	-.16415E+01	.34309E+00	.88881E-01	.70763E+00	.48640E-02	.14694E-02	.73016E+00	.74333E+00	.10173E-01

THETA= .34907E+00

0.	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.73507E+00	.18990E-01	.46035E-02	.78033E+00	.80279E+00	.12648E-01
.50000E-01	-.16081E+00	.85317E-01	.20637E-01	.73431E+00	.18908E-01	.45894E-02	.77946E+00	.80187E+00	.12624E-01
.10000E+00	-.32013E+00	.16930E+00	.41154E-01	.73251E+00	.18664E-01	.45470E-02	.77685E+00	.79912E+00	.12551E-01
.15000E+00	-.47644E+00	.25061E+00	.61133E-01	.72930E+00	.18257E-01	.44763E-02	.77250E+00	.79453E+00	.12429E-01
.20000E+00	-.62826E+00	.32792E+00	.80395E-01	.72481E+00	.17687E-01	.43775E-02	.76641E+00	.78810E+00	.12259E-01
.25000E+00	-.77409E+00	.39988E+00	.98701E-01	.71904E+00	.16955E-01	.42503E-02	.75858E+00	.77984E+00	.12040E-01
.30000E+00	-.91241E+00	.46518E+00	.11581E+00	.71198E+00	.16060E-01	.40949E-02	.74901E+00	.76975E+00	.11773E-01
.35000E+00	-.10417E+01	.52246E+00	.13149E+00	.70365E+00	.15002E-01	.39113E-02	.73770E+00	.75781E+00	.11457E-01
.40000E+00	-.11606E+01	.57040E+00	.14549E+00	.69403E+00	.13781E-01	.36994E-02	.72465E+00	.74404E+00	.11092E-01
.45000E+00	-.12674E+01	.60766E+00	.15758E+00	.68312E+00	.12397E-01	.34592E-02	.70986E+00	.72844E+00	.10679E-01
.50000E+00	-.13608E+01	.63290E+00	.16752E+00	.67094E+00	.10851E-01	.31908E-02	.69333E+00	.71100E+00	.10217E-01
.55000E+00	-.14392E+01	.64480E+00	.17506E+00	.65747E+00	.91413E-02	.28941E-02	.67506E+00	.69173E+00	.97070E-02

THETA= .52360E+00

0.	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.74293E+00	.25585E-01	.67299E-02	.77247E+00	.80279E+00	.11656E-01
.50000E-01	-.12547E+00	.11495E+00	.30256E-01	.74159E+00	.25475E-01	.67092E-02	.77097E+00	.80122E+00	.11634E-01
.10000E+00	-.24980E+00	.22810E+00	.60163E-01	.73757E+00	.25146E-01	.66472E-02	.76646E+00	.79650E+00	.11567E-01
.15000E+00	-.37184E+00	.33765E+00	.89371E-01	.73086E+00	.24598E-01	.65440E-02	.75895E+00	.78865E+00	.11455E-01
.20000E+00	-.49046E+00	.44180E+00	.11753E+00	.72147E+00	.23830E-01	.63994E-02	.74843E+00	.77765E+00	.11298E-01
.25000E+00	-.60452E+00	.53876E+00	.14429E+00	.70940E+00	.22843E-01	.62135E-02	.73491E+00	.76351E+00	.11096E-01
.30000E+00	-.71288E+00	.62673E+00	.15930E+00	.69464E+00	.21637E-01	.59864E-02	.71838E+00	.74623E+00	.10850E-01
.35000E+00	-.81438E+00	.70391E+00	.19222E+00	.67720E+00	.20211E-01	.57179E-02	.69884E+00	.72581E+00	.10559E-01
.40000E+00	-.90790E+00	.76850E+00	.21269E+00	.65708E+00	.18567E-01	.54091E-02	.67630E+00	.70224E+00	.10223E-01
.45000E+00	-.99229E+00	.81870E+00	.23036E+00	.63428E+00	.16702E-01	.50570E-02	.65076E+00	.67554E+00	.98420E-02
.50000E+00	-.10664E+01	.85271E+00	.24489E+00	.60879E+00	.14619E-01	.46646E-02	.62220E+00	.64569E+00	.94164E-02

THETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF		
.55000E+00	-.11291E+01	.86874E+00	.25592E+00	.58062E+00	.12316E-01	.42309E-02	.59065E+00	.61270E+00	.89460E-02		
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
.50000E-01	-.82113E-01	.13071E+00	.38897E-01	.75257E+00	.29094E-01	.86517E-02	.76283E+00	.80279E+00	.10311E-01		
.10000E+00	-.16352E+00	.25938E+00	.77344E-01	.75037E+00	.28969E-01	.86252E-02	.75037E+00	.80042E+00	.10291E-01		
.15000E+00	-.24353E+00	.38396E+00	.11489E+00	.73277E+00	.28595E-01	.85455E-02	.74377E+00	.79330E+00	.10231E-01		
.20000E+00	-.32143E+00	.50240E+00	.15109E+00	.71737E+00	.27972E-01	.84128E-02	.73277E+00	.78144E+00	.10132E-01		
.25000E+00	-.39652E+00	.61266E+00	.18550E+00	.69757E+00	.27099E-01	.82269E-02	.71737E+00	.76483E+00	.99937E-02		
.30000E+00	-.46811E+00	.71269E+00	.21765E+00	.67337E+00	.25976E-01	.79880E-02	.69757E+00	.74348E+00	.98154E-02		
.35000E+00	-.53548E+00	.80046E+00	.24711E+00	.64477E+00	.24605E-01	.76350E-02	.64477E+00	.71739E+00	.95974E-02		
.40000E+00	-.59794E+00	.87390E+00	.27343E+00	.61176E+00	.21113E-01	.69525E-02	.61176E+00	.65097E+00	.93398E-02		
.45000E+00	-.65478E+00	.93099E+00	.29615E+00	.57436E+00	.18993E-01	.65012E-02	.57436E+00	.61064E+00	.90705E-02		
.50000E+00	-.70530E+00	.96966E+00	.31483E+00	.53256E+00	.16624E-01	.59967E-02	.53256E+00	.56557E+00	.87293E-02		
.55000E+00	-.74881E+00	.98789E+00	.32901E+00	.48635E+00	.14005E-01	.54391E-02	.48635E+00	.51576E+00	.83293E-02		
THETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF		
.50000E-01	-.35974E-01	.13071E+00	.46356E-01	.76283E+00	.29094E-01	.10311E-01	.75257E+00	.80279E+00	.86517E-02		
.10000E+00	-.71713E-01	.25938E+00	.92176E-01	.75037E+00	.28969E-01	.10279E-01	.74947E+00	.79956E+00	.86351E-02		
.15000E+00	-.10698E+00	.38396E+00	.13692E+00	.73481E+00	.28595E-01	.10184E-01	.74015E+00	.78989E+00	.85852E-02		
.20000E+00	-.14155E+00	.50240E+00	.18007E+00	.71301E+00	.27972E-01	.10026E-01	.72463E+00	.77377E+00	.85021E-02		
.25000E+00	-.17518E+00	.61266E+00	.22107E+00	.68498E+00	.27099E-01	.98045E-02	.70290E+00	.75119E+00	.83857E-02		
.30000E+00	-.20763E+00	.71269E+00	.25939E+00	.65073E+00	.25976E-01	.95197E-02	.67496E+00	.72217E+00	.82361E-02		
.35000E+00	-.23867E+00	.80046E+00	.29450E+00	.61025E+00	.22984E-01	.91716E-02	.64080E+00	.68670E+00	.80532E-02		
.40000E+00	-.26808E+00	.87390E+00	.32586E+00	.56354E+00	.21113E-01	.87603E-02	.60044E+00	.64477E+00	.78371E-02		
.45000E+00	-.29560E+00	.93099E+00	.35294E+00	.51060E+00	.18993E-01	.82857E-02	.55387E+00	.59640E+00	.75877E-02		
.50000E+00	-.32102E+00	.96966E+00	.37519E+00	.45143E+00	.16624E-01	.77478E-02	.50109E+00	.54158E+00	.73050E-02		
.55000E+00	-.34408E+00	.98789E+00	.39210E+00	.38604E+00	.14005E-01	.71466E-02	.44210E+00	.48031E+00	.69891E-02		
THETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF		
.50000E-01	-.10472E+01	.13071E+00	.52406E-01	.77247E+00	.25585E-01	.11656E-01	.74293E+00	.80279E+00	.86517E-02		
.10000E+00	.14560E+00	.22810E+00	.10421E+00	.76850E+00	.25475E-01	.11621E-01	.73905E+00	.79876E+00	.67169E-02		
.15000E+00	.21329E-01	.33765E+00	.15480E+00	.75658E+00	.25146E-01	.11513E-01	.72741E+00	.78668E+00	.66781E-02		
.20000E+00	.27485E-01	.44180E+00	.20357E+00	.73672E+00	.24598E-01	.11335E-01	.70800E+00	.76655E+00	.66135E-02		
.25000E+00	.32823E-01	.53876E+00	.24992E+00	.70891E+00	.23830E-01	.11084E-01	.68084E+00	.73837E+00	.65229E-02		
.30000E+00	.37140E-01	.62673E+00	.29324E+00	.67316E+00	.22843E-01	.10762E-01	.64591E+00	.70214E+00	.64065E-02		
.35000E+00	.40229E-01	.70391E+00	.33294E+00	.62945E+00	.21637E-01	.10369E-01	.60322E+00	.65785E+00	.62643E-02		
.40000E+00	.41889E-01	.76850E+00	.36839E+00	.57781E+00	.20211E-01	.99037E-02	.55277E+00	.60552E+00	.60961E-02		
.45000E+00	.41913E-01	.81870E+00	.39900E+00	.51822E+00	.18567E-01	.93671E-02	.49456E+00	.54513E+00	.59022E-02		
.50000E+00	.40097E-01	.85271E+00	.42416E+00	.45068E+00	.16702E-01	.87590E-02	.42859E+00	.47669E+00	.56823E-02		
.55000E+00	.36238E-01	.86874E+00	.44327E+00	.37520E+00	.14619E-01	.80793E-02	.35485E+00	.40019E+00	.54366E-02		
THETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF		
.50000E-01	.42727E-01	.85317E-01	.56863E-01	.78033E+00	.18990E-01	.12648E-01	.73507E+00	.80279E+00	.86517E-02		
.10000E+00	.8491E-01	.16930E+00	.11307E+00	.77566E+00	.18908E-01	.12609E-01	.73056E+00	.79811E+00	.45946E-02		
.15000E+00	.12593E+00	.25061E+00	.16796E+00	.76164E+00	.18664E-01	.12493E-01	.71702E+00	.78407E+00	.45681E-02		
.20000E+00	.16528E+00	.32792E+00	.22088E+00	.73828E+00	.18257E-01	.12299E-01	.69445E+00	.76068E+00	.45239E-02		
.25000E+00	.20239E+00	.39989E+00	.27118E+00	.70557E+00	.17687E-01	.12027E-01	.66286E+00	.72792E+00	.44619E-02		
.30000E+00	.23668E+00	.46518E+00	.31819E+00	.66351E+00	.16955E-01	.11678E-01	.62223E+00	.68581E+00	.43823E-02		
.35000E+00	.26759E+00	.52246E+00	.36126E+00	.61211E+00	.16060E-01	.11251E-01	.57259E+00	.63434E+00	.42850E-02		
.40000E+00	.29458E+00	.57040E+00	.39973E+00	.55137E+00	.15002E-01	.10746E-01	.51731E+00	.57351E+00	.41700E-02		
.45000E+00	.31706E+00	.60766E+00	.43294E+00	.48127E+00	.13781E-01	.10164E-01	.44621E+00	.50333E+00	.40373E-02		
.50000E+00	.33448E+00	.63290E+00	.46024E+00	.40183E+00	.12397E-01	.95041E-02	.36948E+00	.42378E+00	.38869E-02		
.55000E+00				.31305E+00	.10851E-01	.87666E-02	.28372E+00	.33488E+00	.37188E-02		





FEE= .69813E+00

THETA= 0.

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.72814E+00	0.	0.	.79232E+00	.79772E+00	.15306E-01
.50000E-01	-.19189E+00	0.	0.	.72813E+00	0.	0.	.79199E+00	.79738E+00	.15276E-01
.10000E+00	-.38197E+00	0.	0.	.72806E+00	0.	0.	.79102E+00	.79638E+00	.15188E-01
.15000E+00	-.56843E+00	0.	0.	.72793E+00	0.	0.	.78941E+00	.79471E+00	.15041E-01
.20000E+00	-.74944E+00	0.	0.	.72775E+00	0.	0.	.78714E+00	.79238E+00	.14835E-01
.25000E+00	-.92320E+00	0.	0.	.72752E+00	0.	0.	.78423E+00	.78937E+00	.14570E-01
.30000E+00	-.10879E+01	0.	0.	.72723E+00	0.	0.	.78068E+00	.78570E+00	.14247E-01
.35000E+00	-.12417E+01	0.	0.	.72690E+00	0.	0.	.77647E+00	.78136E+00	.13865E-01
.40000E+00	-.13828E+01	0.	0.	.72651E+00	0.	0.	.77162E+00	.77636E+00	.13423E-01
.45000E+00	-.15094E+01	0.	0.	.72608E+00	0.	0.	.76612E+00	.77068E+00	.12923E-01
.50000E+00	-.16197E+01	0.	0.	.72559E+00	0.	0.	.75998E+00	.76434E+00	.12364E-01
.55000E+00	-.17118E+01	0.	0.	.72505E+00	0.	0.	.75319E+00	.75733E+00	.11747E-01

THETA= .17453E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.73010E+00	.10972E-01	.26578E-02	.79038E+00	.79772E+00	.15073E-01
.50000E-01	-.18319E+00	.49296E-01	.11949E-01	.72991E+00	.10926E-01	.26497E-02	.78992E+00	.79723E+00	.15044E-01
.10000E+00	-.36466E+00	.97836E-01	.23760E-01	.72936E+00	.10788E-01	.26252E-02	.78852E+00	.79579E+00	.14957E-01
.15000E+00	-.54267E+00	.14487E+00	.35295E-01	.72844E+00	.10558E-01	.25844E-02	.78619E+00	.79339E+00	.14813E-01
.20000E+00	-.71550E+00	.18963E+00	.46416E-01	.72715E+00	.10236E-01	.25273E-02	.78293E+00	.79002E+00	.14610E-01
.25000E+00	-.88141E+00	.23137E+00	.56985E-01	.72549E+00	.98224E-02	.24539E-02	.77874E+00	.78569E+00	.14349E-01
.30000E+00	-.10387E+01	.26934E+00	.68864E-01	.72346E+00	.93167E-02	.23642E-02	.77362E+00	.78040E+00	.14030E-01
.35000E+00	-.11856E+01	.30277E+00	.75914E-01	.72106E+00	.87191E-02	.22582E-02	.76756E+00	.77414E+00	.13654E-01
.40000E+00	-.13204E+01	.33092E+00	.83998E-01	.71830E+00	.80296E-02	.21358E-02	.76093E+00	.76693E+00	.13219E-01
.45000E+00	-.14414E+01	.35302E+00	.90978E-01	.71516E+00	.72481E-02	.19972E-02	.75266E+00	.75875E+00	.12727E-01
.50000E+00	-.15468E+01	.36832E+00	.96715E-01	.71166E+00	.63747E-02	.18422E-02	.74381E+00	.74961E+00	.12177E-01
.55000E+00	-.16350E+01	.37508E+00	.10107E+00	.70779E+00	.54093E-02	.16709E-02	.73402E+00	.73950E+00	.11568E-01

THETA= .34907E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.73567E+00	.20620E-01	.52349E-02	.78481E+00	.79772E+00	.14383E-01
.50000E-01	-.15814E+00	.92646E-01	.23535E-01	.73502E+00	.20533E-01	.52188E-02	.78394E+00	.79681E+00	.14355E-01
.10000E+00	-.31481E+00	.18387E+00	.46799E-01	.73310E+00	.20274E-01	.51706E-02	.78131E+00	.79409E+00	.14272E-01
.15000E+00	-.46851E+00	.27226E+00	.69518E-01	.72990E+00	.19842E-01	.50903E-02	.77693E+00	.78957E+00	.14134E-01
.20000E+00	-.61777E+00	.35639E+00	.91422E-01	.72541E+00	.19238E-01	.49779E-02	.77080E+00	.78323E+00	.13941E-01
.25000E+00	-.76111E+00	.43484E+00	.11224E+00	.71964E+00	.18460E-01	.48333E-02	.76292E+00	.77508E+00	.13692E-01
.30000E+00	-.89704E+00	.50619E+00	.13170E+00	.71259E+00	.17510E-01	.46566E-02	.75329E+00	.76513E+00	.13388E-01
.35000E+00	-.10241E+01	.56902E+00	.14952E+00	.70426E+00	.16387E-01	.44477E-02	.74190E+00	.75336E+00	.13028E-01
.40000E+00	-.11408E+01	.62192E+00	.16544E+00	.69464E+00	.15091E-01	.42068E-02	.72876E+00	.73978E+00	.12614E-01
.45000E+00	-.12456E+01	.66346E+00	.17919E+00	.68374E+00	.13622E-01	.39336E-02	.71387E+00	.72439E+00	.12144E-01
.50000E+00	-.13371E+01	.69222E+00	.19049E+00	.67156E+00	.11980E-01	.36284E-02	.69724E+00	.70719E+00	.11619E-01
.55000E+00	-.14138E+01	.70679E+00	.19907E+00	.65810E+00	.10166E-01	.32911E-02	.67884E+00	.68818E+00	.11038E-01

THETA= .52360E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.74420E+00	.27781E-01	.76529E-02	.77628E+00	.79772E+00	.13255E-01
.50000E-01	-.11976E+00	.12482E+00	.34406E-01	.74286E+00	.27665E-01	.76294E-02	.77477E+00	.79616E+00	.13230E-01
.10000E+00	-.23843E+00	.24773E+00	.68415E-01	.73884E+00	.27315E-01	.75590E-02	.77026E+00	.79150E+00	.13153E-01
.15000E+00	-.35488E+00	.36681E+00	.10163E+00	.73213E+00	.26733E-01	.74415E-02	.76274E+00	.78372E+00	.13026E-01
.20000E+00	-.46804E+00	.48016E+00	.13365E+00	.72275E+00	.25919E-01	.72771E-02	.75222E+00	.77283E+00	.12848E-01
.25000E+00	-.57678E+00	.58585E+00	.16408E+00	.71068E+00	.24871E-01	.70658E-02	.73868E+00	.75884E+00	.12618E-01
.30000E+00	-.68002E+00	.68198E+00	.19253E+00	.69594E+00	.23591E-01	.68074E-02	.72214E+00	.74173E+00	.12338E-01
.35000E+00	-.77665E+00	.76664E+00	.21859E+00	.67851E+00	.22078E-01	.65021E-02	.70259E+00	.72151E+00	.12007E-01
.40000E+00	-.86556E+00	.83791E+00	.24186E+00	.65840E+00	.20332E-01	.61499E-02	.68003E+00	.69819E+00	.11625E-01
.45000E+00	-.94566E+00	.89388E+00	.26196E+00	.63560E+00	.18353E-01	.57506E-02	.65446E+00	.67175E+00	.11192E-01
.50000E+00	-.10158E+01	.93263E+00	.27848E+00	.61013E+00	.16141E-01	.53044E-02	.62589E+00	.64220E+00	.10708E-01



THETA =	U8AR	V8AR	W8AR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.10750E+01	.95226E+00	.29102E+00	.58198E+00	.13697E-01	.48112E-02	.59430E+00	.60954E+00	.10173E-01
THETA =	.69813E+00								
0.	0.	0.	0.						
.50000E-01	-.72683E-01	.14194E+00	.46232E-01	.75467E+00	.31591E-01	.98384E-02	.76581E+00	.79772E+00	.11725E-01
.10000E+00	-.14473E+00	.28171E+00	.87953E-01	.75247E+00	.31459E-01	.98082E-02	.76336E+00	.79536E+00	.11702E-01
.15000E+00	-.21550E+00	.41712E+00	.13065E+00	.74587E+00	.31062E-01	.97176E-02	.75671E+00	.78831E+00	.11635E-01
.20000E+00	-.28436E+00	.54602E+00	.17182E+00	.71949E+00	.30400E-01	.95667E-02	.74534E+00	.77654E+00	.11522E-01
.25000E+00	-.35068E+00	.66621E+00	.21094E+00	.69969E+00	.29474E-01	.93553E-02	.72942E+00	.76008E+00	.11364E-01
.30000E+00	-.41381E+00	.77552E+00	.24751E+00	.67551E+00	.28282E-01	.90836E-02	.70895E+00	.73891E+00	.11162E-01
.35000E+00	-.47311E+00	.87179E+00	.28101E+00	.64692E+00	.26826E-01	.87515E-02	.68393E+00	.71303E+00	.10914E-01
.40000E+00	-.52796E+00	.95283E+00	.31093E+00	.61394E+00	.23120E-01	.79061E-02	.62024E+00	.64716E+00	.10621E-01
.45000E+00	-.57771E+00	.10165E+01	.33677E+00	.57655E+00	.20870E-01	.73928E-02	.58158E+00	.60717E+00	.10283E-01
.50000E+00	-.62173E+00	.10605E+01	.35801E+00	.53477E+00	.18355E-01	.68192E-02	.53836E+00	.56248E+00	.98999E-02
.55000E+00	-.65938E+00	.10829E+01	.37413E+00	.48859E+00	.15575E-01	.61852E-02	.49060E+00	.51308E+00	.94717E-02
THETA =	.87266E+00								.89986E-02
0.	0.	0.	0.						
.50000E-01	-.22592E-01	.14194E+00	.52714E-01	.76581E+00	.31591E-01	.11725E-01	.75467E+00	.79772E+00	.98384E-02
.10000E+00	-.45021E-01	.28171E+00	.10482E+00	.76270E+00	.31459E-01	.11689E-01	.75157E+00	.79452E+00	.98195E-02
.15000E+00	-.67176E-01	.41712E+00	.15570E+00	.73780E+00	.31062E-01	.11581E-01	.74229E+00	.78491E+00	.97628E-02
.20000E+00	-.88903E-01	.54602E+00	.20476E+00	.71601E+00	.30400E-01	.11401E-01	.72682E+00	.76891E+00	.96682E-02
.25000E+00	-.11006E+00	.66621E+00	.25139E+00	.68800E+00	.29474E-01	.11149E-01	.70516E+00	.74650E+00	.95359E-02
.30000E+00	-.13051E+00	.77552E+00	.29497E+00	.65377E+00	.28282E-01	.10825E-01	.67731E+00	.71770E+00	.93657E-02
.35000E+00	-.15010E+00	.87179E+00	.33489E+00	.61331E+00	.26826E-01	.10430E-01	.64304E+00	.68249E+00	.91578E-02
.40000E+00	-.16869E+00	.95283E+00	.37055E+00	.56629E+00	.25106E-01	.9969E-02	.60304E+00	.64080E+00	.89120E-02
.45000E+00	-.18615E+00	.10165E+01	.40135E+00	.51371E+00	.23120E-01	.94221E-02	.55662E+00	.59287E+00	.86284E-02
.50000E+00	-.20232E+00	.10605E+01	.42666E+00	.45458E+00	.20870E-01	.88104E-02	.50402E+00	.53845E+00	.83070E-02
.55000E+00	-.21707E+00	.10829E+01	.44588E+00	.38922E+00	.18355E-01	.81268E-02	.44522E+00	.47764E+00	.79477E-02
THETA =	.10472E+01								.75507E-02
0.	0.	0.	0.						
.50000E-01	-.24498E-01	.12482E+00	.59594E-01	.77628E+00	.27781E-01	.13255E-01	.74420E+00	.79772E+00	.76529E-02
.10000E+00	-.48674E-01	.24773E+00	.11850E+00	.77231E+00	.27665E-01	.13215E-01	.74034E+00	.79372E+00	.76382E-02
.15000E+00	-.72205E-01	.36681E+00	.17603E+00	.76040E+00	.27315E-01	.13093E-01	.72874E+00	.78172E+00	.75941E-02
.20000E+00	-.94769E-01	.48016E+00	.23149E+00	.74054E+00	.26733E-01	.12889E-01	.70941E+00	.76173E+00	.75206E-02
.25000E+00	-.11604E+00	.58585E+00	.28420E+00	.71275E+00	.25919E-01	.12604E-01	.68236E+00	.73375E+00	.74176E-02
.30000E+00	-.13571E+00	.68198E+00	.33347E+00	.67701E+00	.24871E-01	.12238E-01	.64757E+00	.69777E+00	.72852E-02
.35000E+00	-.15344E+00	.76664E+00	.37860E+00	.63334E+00	.23591E-01	.11791E-01	.60506E+00	.65379E+00	.71235E-02
.40000E+00	-.16891E+00	.83791E+00	.41892E+00	.58172E+00	.22078E-01	.11262E-01	.55481E+00	.60182E+00	.69323E-02
.45000E+00	-.18180E+00	.89388E+00	.45373E+00	.52216E+00	.20332E-01	.10652E-01	.49684E+00	.54185E+00	.67117E-02
.50000E+00	-.19180E+00	.93263E+00	.48234E+00	.45466E+00	.18353E-01	.99603E-02	.43113E+00	.47388E+00	.64617E-02
.55000E+00	-.19857E+00	.95226E+00	.50407E+00	.37922E+00	.16141E-01	.91875E-02	.35770E+00	.39792E+00	.61822E-02
THETA =	.12217E+01								.58734E-02
0.	0.	0.	0.						
.50000E-01	-.62878E-01	.92646E-01	.64663E-01	.78481E+00	.20620E-01	.14383E-01	.73567E+00	.79772E+00	.52349E-02
.10000E+00	-.12506E+00	.18387E+00	.12858E+00	.78014E+00	.20533E-01	.14339E-01	.73117E+00	.79307E+00	.52248E-02
.15000E+00	-.18583E+00	.27226E+00	.19100E+00	.76613E+00	.20274E-01	.14206E-01	.71769E+00	.77912E+00	.51947E-02
.20000E+00	-.24450E+00	.35639E+00	.25118E+00	.74278E+00	.19842E-01	.13986E-01	.69523E+00	.75589E+00	.51444E-02
.25000E+00	-.30037E+00	.43484E+00	.30837E+00	.71009E+00	.19238E-01	.13677E-01	.66377E+00	.72335E+00	.50739E-02
.30000E+00	-.35273E+00	.50619E+00	.36183E+00	.66806E+00	.18460E-01	.13279E-01	.62334E+00	.68152E+00	.49834E-02
.35000E+00	-.40088E+00	.56902E+00	.41081E+00	.61668E+00	.17510E-01	.12794E-01	.57391E+00	.63039E+00	.48727E-02
.40000E+00	-.4413E+00	.62192E+00	.45455E+00	.55597E+00	.16387E-01	.12220E-01	.51550E+00	.56997E+00	.47420E-02
.45000E+00	-.48176E+00	.66346E+00	.49232E+00	.48592E+00	.15091E-01	.11558E-01	.44810E+00	.50025E+00	.45911E-02
.50000E+00	-.51308E+00	.69222E+00	.52337E+00	.40652E+00	.13622E-01	.10808E-01	.37172E+00	.44200E+00	.44200E-02
					.11980E-01	.99690E-02	.28635E+00	.33293E+00	.42289E-02

THETA=	R	UBAR	VRAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	0.	.79038E+00	.10972E-01	.15073E-01	.73010E+00	.79772E+00	.26578E-02
.50000E-01	.87929E-01	.49296E-01	.67767E-01	.78526E+00	.10926E-01	.15027E-01	.72519E+00	.79264E+00	.26527E-02	
.10000E+00	.17491E+00	.97836E-01	.13475E+00	.76988E+00	.10788E-01	.14888E-01	.71048E+00	.77743E+00	.26374E-02	
.15000E+00	.25999E+00	.14487E+00	.20017E+00	.74424E+00	.10559E-01	.14657E-01	.68597E+00	.75207E+00	.26119E-02	
.20000E+00	.34223E+00	.18963E+00	.26324E+00	.70835E+00	.10233E-01	.14333E-01	.65164E+00	.71656E+00	.25761E-02	
.25000E+00	.42068E+00	.23137E+00	.32318E+00	.66221E+00	.98224E-02	.13917E-01	.60752E+00	.67091E+00	.25301E-02	
.30000E+00	.49438E+00	.26934E+00	.37920E+00	.60581E+00	.93167E-02	.13408E-01	.55358E+00	.61512E+00	.24740E-02	
.35000E+00	.56239E+00	.30277E+00	.43053E+00	.53916E+00	.87191E-02	.12807E-01	.48984E+00	.54918E+00	.24076E-02	
.40000E+00	.62376E+00	.33092E+00	.47638E+00	.46226E+00	.80296E-02	.12113E-01	.41629E+00	.47310E+00	.23309E-02	
.45000E+00	.67754E+00	.35302E+00	.51596E+00	.37510E+00	.72481E-02	.11326E-01	.33294E+00	.38688E+00	.22441E-02	
.50000E+00	.72279E+00	.36832E+00	.54850E+00	.27769E+00	.63747E-02	.10448E-01	.23978E+00	.29051E+00	.21471E-02	
.55000E+00	.75855E+00	.37608E+00	.57321E+00	.17002E+00	.54093E-02	.94762E-02	.13681E+00	.18400E+00	.20398E-02	
THETA=	.15708E+01									

THETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	0.	.79232E+00	.17134E-14	.15306E-01	.72816E+00	.79772E+00	.40877E-15
.50000E-01	.96629E-01	.76985E-14	.68813E-01	.78703E+00	.17063E-14	.15259E-01	.72312E+00	.79250E+00	.40798E-15	
.10000E+00	.19222E+00	.15279E-13	.13683E+00	.77118E+00	.16847E-14	.15118E-01	.70798E+00	.77684E+00	.40562E-15	
.15000E+00	.28575E+00	.26245E-13	.20326E+00	.74475E+00	.16488E-14	.14883E-01	.68275E+00	.75074E+00	.40170E-15	
.20000E+00	.37617E+00	.29614E-13	.26730E+00	.70775E+00	.15986E-14	.14554E-01	.64743E+00	.71421E+00	.39620E-15	
.25000E+00	.46246E+00	.36133E-13	.32816E+00	.66018E+00	.15340E-14	.14132E-01	.60202E+00	.66723E+00	.38913E-15	
.30000E+00	.54357E+00	.42062E-13	.38505E+00	.60204E+00	.14550E-14	.13615E-01	.54652E+00	.60982E+00	.38049E-15	
.35000E+00	.61848E+00	.47284E-13	.43717E+00	.53333E+00	.13617E-14	.13004E-01	.48093E+00	.54197E+00	.37028E-15	
.40000E+00	.68615E+00	.51679E-13	.48372E+00	.45404E+00	.12540E-14	.12300E-01	.40524E+00	.46358E+00	.35849E-15	
.45000E+00	.74554E+00	.55131E-13	.52392E+00	.36419E+00	.11319E-14	.11501E-01	.31947E+00	.37495E+00	.34514E-15	
.50000E+00	.79562E+00	.57521E-13	.55696E+00	.26376E+00	.99535E-15	.10609E-01	.22345E+00	.27578E+00	.33021E-15	
.55000E+00	.83636E+00	.58732E-13	.58205E+00	.15277E+00	.84477E-15	.96224E-02	.11765E+00	.16617E+00	.31372E-15	

THETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	0.	.79038E+00	-.10972E-01	.15073E-01	.73010E+00	.79772E+00	-.26578E-02
.50000E-01	.87929E-01	-.49296E-01	.67767E-01	.78526E+00	-.10926E-01	.15027E-01	.72519E+00	.79264E+00	-.26527E-02	
.10000E+00	.17491E+00	-.97836E-01	.13475E+00	.76988E+00	-.10788E-01	.14888E-01	.71048E+00	.77743E+00	-.26374E-02	
.15000E+00	.25999E+00	-.14487E+00	.20017E+00	.74424E+00	-.10558E-01	.14657E-01	.68597E+00	.75207E+00	-.26119E-02	
.20000E+00	.34223E+00	-.18963E+00	.26324E+00	.70835E+00	-.10236E-01	.14333E-01	.65164E+00	.71656E+00	-.25761E-02	
.25000E+00	.42068E+00	-.23137E+00	.32318E+00	.66221E+00	-.98224E-02	.13917E-01	.60752E+00	.67091E+00	-.25301E-02	
.30000E+00	.49438E+00	-.26934E+00	.37920E+00	.60581E+00	-.93167E-02	.13408E-01	.55358E+00	.61512E+00	-.24740E-02	
.35000E+00	.56239E+00	-.30277E+00	.43053E+00	.53916E+00	-.87191E-02	.12807E-01	.48984E+00	.54918E+00	-.24076E-02	
.40000E+00	.62376E+00	-.33092E+00	.47638E+00	.46226E+00	-.80296E-02	.12113E-01	.41629E+00	.47310E+00	-.23309E-02	
.45000E+00	.67754E+00	-.35302E+00	.51596E+00	.37510E+00	-.72481E-02	.11326E-01	.33294E+00	.38688E+00	-.22441E-02	
.50000E+00	.72279E+00	-.36832E+00	.54850E+00	.27769E+00	-.63747E-02	.10448E-01	.23978E+00	.29051E+00	-.21471E-02	
.55000E+00	.75855E+00	-.37608E+00	.57321E+00	.17069E+00	-.54093E-02	.94762E-02	.13681E+00	.18400E+00	-.20398E-02	

THETA =	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	0.	.78481E+00	-.20620E-01	.14383E-01	.73507E+00	.79772E+00	-.52349E-02
.50000E-01	.62878E-01	-.92646E-01	.64663E-01	.78014E+00	-.20533E-01	.14339E-01	.14339E-01	.73117E+00	.79307E+00	-.52248E-02
.10000E+00	.12506E+00	-.18387E+00	.12506E+00	.76613E+00	-.20274E-01	.14206E-01	.14206E-01	.71769E+00	.77912E+00	-.51947E-02
.15000E+00	.18583E+00	-.27226E+00	.19100E+00	.74278E+00	-.19842E-01	.13986E-01	.13986E-01	.69523E+00	.75589E+00	-.51444E-02
.20000E+00	.24450E+00	-.35639E+00	.25118E+00	.71009E+00	-.19238E-01	.13677E-01	.13677E-01	.66377E+00	.72335E+00	-.50739E-02
.25000E+00	.30037E+00	-.43484E+00	.30837E+00	.66806E+00	-.18460E-01	.13279E-01	.13279E-01	.62334E+00	.68152E+00	-.49834E-02
.30000E+00	.35273E+00	-.50619E+00	.36183E+00	.61668E+00	-.17510E-01	.12794E-01	.12794E-01	.57391E+00	.63039E+00	-.48727E-02
.35000E+00	.40088E+00	-.56902E+00	.41081E+00	.5597E+00	-.16387E-01	.12220E-01	.12220E-01	.51550E+00	.56997E+00	-.47420E-02
.40000E+00	.44413E+00	-.62192E+00	.45455E+00	.48592E+00	-.15091E-01	.11558E-01	.11558E-01	.44810E+00	.50025E+00	-.45911E-02
.45000E+00	.48176E+00	-.66345E+00	.49232E+00	.40652E+00	-.13622E-01	.10808E-01	.10808E-01	.37172E+00	.42124E+00	-.44200E-02
.50000E+00	.51308E+00	-.69222E+00	.52337E+00	.31779E+00	-.11980E-01	.99690E-02	.99690E-02	.28635E+00	.33293E+00	-.44289E-02
.55000E+00	.53740E+00	-.70679E+00	.54695E+00	.21971E+00	-.10166E-01	.90421E-02	.90421E-02	.19199E+00	.23532E+00	-.440176E-02

FEE= .87266E+00

THETA= 0.

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.72816E+00	0.	0.	.79772E+00	.79232E+00	.15306E-01
.50000E-01	-.19189E+00	0.	0.	.72813E+00	0.	0.	.79738E+00	.79199E+00	.15276E-01
.10000E+00	-.38197E+00	0.	0.	.72806E+00	0.	0.	.79702E+00	.79102E+00	.15188E-01
.15000E+00	-.56843E+00	0.	0.	.72793E+00	0.	0.	.79671E+00	.78941E+00	.15041E-01
.20000E+00	-.74944E+00	0.	0.	.72775E+00	0.	0.	.79638E+00	.78714E+00	.14835E-01
.25000E+00	-.92320E+00	0.	0.	.72752E+00	0.	0.	.79608E+00	.78423E+00	.14570E-01
.30000E+00	-.10879E+01	0.	0.	.72723E+00	0.	0.	.79570E+00	.78068E+00	.14247E-01
.35000E+00	-.12417E+01	0.	0.	.72690E+00	0.	0.	.79536E+00	.77647E+00	.13865E-01
.40000E+00	-.13828E+01	0.	0.	.72651E+00	0.	0.	.79502E+00	.77162E+00	.13423E-01
.45000E+00	-.15094E+01	0.	0.	.72608E+00	0.	0.	.79468E+00	.76612E+00	.12923E-01
.50000E+00	-.16197E+01	0.	0.	.72559E+00	0.	0.	.79434E+00	.75998E+00	.12364E-01
.55000E+00	-.17118E+01	0.	0.	.72505E+00	0.	0.	.79399E+00	.75319E+00	.11747E-01

THETA= .17453E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.73026E+00	.11895E-01	.26578E-02	.79562E+00	.79232E+00	.15073E-01
.50000E-01	-.18246E+00	0.	.11949E-01	.73007E+00	.11846E-01	.26497E-02	.79514E+00	.79185E+00	.15044E-01
.10000E+00	-.36320E+00	.10609E+00	.23760E-01	.72952E+00	.11699E-01	.26252E-02	.79372E+00	.79044E+00	.14957E-01
.15000E+00	-.54049E+00	.15712E+00	.35295E-01	.72860E+00	.11455E-01	.25844E-02	.79134E+00	.78809E+00	.14813E-01
.20000E+00	-.71262E+00	.20575E+00	.46416E-01	.72731E+00	.11114E-01	.25273E-02	.78802E+00	.78480E+00	.14610E-01
.25000E+00	-.87785E+00	.25116E+00	.56985E-01	.72565E+00	.10675E-01	.24539E-02	.78374E+00	.78057E+00	.14349E-01
.30000E+00	-.10345E+01	.29256E+00	.66864E-01	.72363E+00	.10138E-01	.23642E-02	.77852E+00	.77540E+00	.14030E-01
.35000E+00	-.11808E+01	.32913E+00	.75914E-01	.72123E+00	.95034E-02	.22582E-02	.77234E+00	.76929E+00	.13654E-01
.40000E+00	-.13150E+01	.36009E+00	.83998E-01	.71847E+00	.87713E-02	.21358E-02	.76521E+00	.76224E+00	.13219E-01
.45000E+00	-.14354E+01	.38462E+00	.90978E-01	.71533E+00	.79417E-02	.19972E-02	.75714E+00	.75425E+00	.12727E-01
.50000E+00	-.15403E+01	.40191E+00	.96715E-01	.71183E+00	.70145E-02	.18422E-02	.74811E+00	.74533E+00	.12177E-01
.55000E+00	-.16281E+01	.41118E+00	.10107E+00	.70796E+00	.59896E-02	.16709E-02	.73814E+00	.73546E+00	.11568E-01

THETA= .34907E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.73630E+00	.22355E-01	.52349E-02	.79232E+00	.79232E+00	.14383E-01
.50000E-01	-.15530E+00	.10044E+00	.23535E-01	.73566E+00	.22263E-01	.52188E-02	.78870E+00	.79143E+00	.14355E-01
.10000E+00	-.30914E+00	.19938E+00	.46799E-01	.73373E+00	.21988E-01	.51706E-02	.78605E+00	.78875E+00	.14272E-01
.15000E+00	-.46006E+00	.29530E+00	.69518E-01	.73053E+00	.21529E-01	.50903E-02	.78164E+00	.78429E+00	.14134E-01
.20000E+00	-.60660E+00	.38668E+00	.91422E-01	.72605E+00	.20887E-01	.49779E-02	.77747E+00	.77805E+00	.13941E-01
.25000E+00	-.74729E+00	.47203E+00	.11224E+00	.72028E+00	.20062E-01	.48333E-02	.76713E+00	.77002E+00	.13692E-01
.30000E+00	-.88068E+00	.54983E+00	.13170E+00	.71323E+00	.19053E-01	.46566E-02	.75783E+00	.76021E+00	.13388E-01
.35000E+00	-.10053E+01	.61857E+00	.14952E+00	.70490E+00	.17860E-01	.44477E-02	.74637E+00	.74862E+00	.13028E-01
.40000E+00	-.11197E+01	.67674E+00	.16544E+00	.69529E+00	.16485E-01	.42068E-02	.73314E+00	.73524E+00	.12614E-01
.45000E+00	-.12224E+01	.72284E+00	.17919E+00	.68440E+00	.14925E-01	.39336E-02	.71814E+00	.72008E+00	.12144E-01
.50000E+00	-.13120E+01	.75535E+00	.19049E+00	.67223E+00	.13183E-01	.36284E-02	.70139E+00	.70313E+00	.11619E-01
.55000E+00	-.13869E+01	.77276E+00	.19907E+00	.65878E+00	.11257E-01	.32911E-02	.68287E+00	.68440E+00	.11038E-01

THETA= .52360E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.74555E+00	.30118E-01	.76529E-02	.78033E+00	.79232E+00	.13255E-01
.50000E-01	-.11369E+00	.13533E+00	.34406E-01	.74421E+00	.29995E-01	.76294E-02	.77882E+00	.79078E+00	.13200E-01
.10000E+00	-.22632E+00	.26862E+00	.68415E-01	.74019E+00	.29624E-01	.75590E-02	.77431E+00	.78616E+00	.13153E-01
.15000E+00	-.33684E+00	.39785E+00	.10163E+00	.73349E+00	.29006E-01	.74415E-02	.76678E+00	.78477E+00	.13026E-01
.20000E+00	-.44417E+00	.52098E+00	.13365E+00	.72411E+00	.28141E-01	.72771E-02	.75624E+00	.77771E+00	.12848E-01
.25000E+00	-.54726E+00	.63596E+00	.16408E+00	.71205E+00	.27029E-01	.70658E-02	.74270E+00	.75386E+00	.12618E-01
.30000E+00	-.64506E+00	.74078E+00	.19253E+00	.69731E+00	.25670E-01	.68074E-02	.72614E+00	.73694E+00	.12338E-01
.35000E+00	-.73649E+00	.83340E+00	.21859E+00	.67989E+00	.24063E-01	.65021E-02	.70657E+00	.71694E+00	.12007E-01
.40000E+00	-.82050E+00	.91178E+00	.24186E+00	.65979E+00	.22210E-01	.61499E-02	.68399E+00	.69387E+00	.11625E-01
.45000E+00	-.89604E+00	.97388E+00	.26196E+00	.63702E+00	.20109E-01	.57506E-02	.65840E+00	.66771E+00	.11192E-01
.50000E+00	-.96204E+00	.10177E+01	.27848E+00	.61156E+00	.17761E-01	.53044E-02	.62980E+00	.63849E+00	.10708E-01

.55000E+00	-.10174E+01	.10411E+01	.29102E+00	.58342E+00	.15166E-01	.48112E-02	.59819E+00	.60618E+00	.10173E-01	
THETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	-.62649E-01	.15389E+00	.44232E-01	.75690E+00	.34249E-01	.98384E-02	.76898E+00	.79232E+00	.79232E+00	.11725E-01
.10000E+00	-.12473E+00	.30547E+00	.87953E-01	.75470E+00	.34109E-01	.98082E-02	.76671E+00	.78999E+00	.78999E+00	.11702E-01
.15000E+00	-.18568E+00	.45242E+00	.13065E+00	.74811E+00	.33687E-01	.97176E-02	.75990E+00	.78299E+00	.78299E+00	.11635E-01
.20000E+00	-.24492E+00	.59243E+00	.17182E+00	.73712E+00	.32985E-01	.95667E-02	.74855E+00	.77134E+00	.77134E+00	.11522E-01
.25000E+00	-.30189E+00	.72319E+00	.21094E+00	.72174E+00	.32001E-01	.93553E-02	.73266E+00	.75502E+00	.75502E+00	.11364E-01
.30000E+00	-.35602E+00	.84239E+00	.24751E+00	.70196E+00	.30736E-01	.90836E-02	.71223E+00	.73404E+00	.73404E+00	.11162E-01
.35000E+00	-.40674E+00	.94771E+00	.28101E+00	.67778E+00	.29191E-01	.87515E-02	.68726E+00	.70839E+00	.70839E+00	.10914E-01
.40000E+00	-.45349E+00	.10368E+01	.31093E+00	.64921E+00	.27364E-01	.83590E-02	.65775E+00	.67808E+00	.67808E+00	.10621E-01
.45000E+00	-.49570E+00	.11075E+01	.33677E+00	.61625E+00	.25256E-01	.79061E-02	.62370E+00	.64311E+00	.64311E+00	.10283E-01
.50000E+00	-.53280E+00	.11573E+01	.35801E+00	.57889E+00	.22867E-01	.73928E-02	.58512E+00	.60348E+00	.60348E+00	.98999E-02
.55000E+00	-.56421E+00	.11839E+01	.37413E+00	.53713E+00	.20197E-01	.68192E-02	.54199E+00	.55919E+00	.55919E+00	.94717E-02
THETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	-.83303E-02	.15389E+00	.52714E-01	.76898E+00	.34249E-01	.11725E-01	.75690E+00	.79232E+00	.79232E+00	.98384E-02
.10000E+00	-.16616E-01	.30547E+00	.10482E+00	.76587E+00	.34109E-01	.11689E-01	.75382E+00	.78914E+00	.78914E+00	.98195E-02
.15000E+00	-.24814E-01	.45242E+00	.15570E+00	.75654E+00	.33687E-01	.11581E-01	.74456E+00	.77962E+00	.77962E+00	.97628E-02
.20000E+00	-.32879E-01	.59243E+00	.20476E+00	.74098E+00	.32985E-01	.11401E-01	.72915E+00	.76374E+00	.76374E+00	.96682E-02
.25000E+00	-.40767E-01	.72319E+00	.25139E+00	.71921E+00	.32001E-01	.11149E-01	.70756E+00	.74151E+00	.74151E+00	.95359E-02
.30000E+00	-.48434E-01	.84239E+00	.29497E+00	.69121E+00	.30736E-01	.10825E-01	.67981E+00	.71294E+00	.71294E+00	.93657E-02
.35000E+00	-.55836E-01	.94771E+00	.33489E+00	.65700E+00	.29191E-01	.10430E-01	.64580E+00	.67801E+00	.67801E+00	.91578E-02
.40000E+00	-.62928E-01	.10368E+01	.37055E+00	.61656E+00	.27364E-01	.99619E-02	.60580E+00	.63673E+00	.63673E+00	.89120E-02
.45000E+00	-.69667E-01	.11075E+01	.40135E+00	.56990E+00	.25256E-01	.94221E-02	.55955E+00	.58910E+00	.58910E+00	.86284E-02
.50000E+00	-.76007E-01	.11573E+01	.42666E+00	.51703E+00	.22867E-01	.88104E-02	.50713E+00	.53513E+00	.53513E+00	.83070E-02
.55000E+00	-.81906E-01	.11839E+01	.44588E+00	.45793E+00	.20197E-01	.81268E-02	.44854E+00	.47480E+00	.47480E+00	.79477E-02
THETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	-.42713E-01	.13533E+00	.59594E-01	.78033E+00	.30118E-01	.13255E-01	.74555E+00	.79232E+00	.79232E+00	.76529E-02
.10000E+00	-.8497E-01	.26862E+00	.11850E+00	.77636E+00	.29995E-01	.13215E-01	.74170E+00	.78835E+00	.78835E+00	.76382E-02
.15000E+00	-.12635E+00	.39785E+00	.17603E+00	.76445E+00	.29624E-01	.13093E-01	.73016E+00	.77645E+00	.77645E+00	.75941E-02
.20000E+00	.16637E+00	.52098E+00	.23149E+00	.74461E+00	.29006E-01	.12889E-01	.71092E+00	.75660E+00	.75660E+00	.75206E-02
.25000E+00	.20461E+00	.63596E+00	.28420E+00	.71683E+00	.28141E-01	.12604E-01	.68398E+00	.72883E+00	.72883E+00	.74176E-02
.30000E+00	.24060E+00	.74078E+00	.33347E+00	.68112E+00	.27029E-01	.12238E-01	.64934E+00	.69311E+00	.69311E+00	.72852E-02
.35000E+00	.27391E+00	.83340E+00	.37860E+00	.63747E+00	.25670E-01	.11791E-01	.60701E+00	.64946E+00	.64946E+00	.71235E-02
.40000E+00	.30408E+00	.91178E+00	.41892E+00	.58588E+00	.24063E-01	.11262E-01	.55699E+00	.59788E+00	.59788E+00	.69323E-02
.45000E+00	.33067E+00	.97388E+00	.45373E+00	.52636E+00	.22210E-01	.10652E-01	.49926E+00	.53835E+00	.53835E+00	.67117E-02
.50000E+00	.35323E+00	.10177E+01	.48234E+00	.45890E+00	.20109E-01	.99603E-02	.43384E+00	.47089E+00	.47089E+00	.64617E-02
.55000E+00	.37131E+00	.10411E+01	.50407E+00	.38350E+00	.17761E-01	.91875E-02	.36073E+00	.39550E+00	.39550E+00	.61822E-02
THETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	-.84323E-01	.10044E+00	.64663E-01	.78958E+00	.22355E-01	.14383E-01	.73630E+00	.79232E+00	.79232E+00	.52349E-02
.10000E+00	.16780E+00	.19938E+00	.12858E+00	.78491E+00	.22263E-01	.14339E-01	.73183E+00	.79232E+00	.79232E+00	.52248E-02
.15000E+00	.24957E+00	.29530E+00	.19100E+00	.77091E+00	.21988E-01	.14206E-01	.71841E+00	.77386E+00	.77386E+00	.51947E-02
.20000E+00	.32880E+00	.38668E+00	.25118E+00	.74757E+00	.21529E-01	.13986E-01	.69605E+00	.75079E+00	.75079E+00	.51444E-02
.25000E+00	.40646E+00	.47203E+00	.30837E+00	.71490E+00	.20887E-01	.13677E-01	.66475E+00	.71848E+00	.71848E+00	.50739E-02
.30000E+00	.47623E+00	.54983E+00	.36183E+00	.67289E+00	.20062E-01	.13279E-01	.62451E+00	.67695E+00	.67695E+00	.49834E-02
.35000E+00	.54272E+00	.61857E+00	.41081E+00	.62155E+00	.19053E-01	.12794E-01	.57532E+00	.62619E+00	.62619E+00	.48727E-02
.40000E+00	.60327E+00	.67674E+00	.45455E+00	.56087E+00	.17860E-01	.12220E-01	.51719E+00	.56620E+00	.56620E+00	.47420E-02
.45000E+00	.65703E+00	.72284E+00	.49232E+00	.49086E+00	.16485E-01	.11558E-01	.45012E+00	.49698E+00	.49698E+00	.45911E-02
.50000E+00	.70315E+00	.75535E+00	.52337E+00	.41151E+00	.14925E-01	.10808E-01	.37410E+00	.41853E+00	.41853E+00	.44200E-02
.55000E+00				.32283E+00	.13183E-01	.99690E-02	.28914E+00	.33085E+00	.33085E+00	.42289E-02



.55000E+00	.74078E+00	.77276E+00	.54695E+00	.22481E+00	.11257E-01	.90421E-02	.19524E+00	.23394E+00	.40176E-02
THETA= .13963F+01									
0.	0.	0.	0.	0.					
.50000E-01	.11148E+00	.53446E-01	.67767E-01	.79562E+00	.11895E-01	.15073E-01	.73026E+00	.79232E+00	.26578E-02
.10000E+00	.22185E+00	.10609E+00	.13475E+00	.79049E+00	.11846E-01	.15027E-01	.72538E+00	.78728E+00	.26527E-02
.15000E+00	.33000E+00	.15712E+00	.20017E+00	.77512E+00	.11699E-01	.14888E-01	.71074E+00	.77217E+00	.26374E-02
.20000E+00	.43482E+00	.20575E+00	.26324E+00	.74950E+00	.11455E-01	.14657E-01	.68635E+00	.74699E+00	.26119E-02
.25000E+00	.53520E+00	.25116E+00	.32318E+00	.71364E+00	.11114E-01	.14333E-01	.65220E+00	.71173E+00	.25761E-02
.30000E+00	.63002E+00	.29256E+00	.37920E+00	.66752E+00	.10675E-01	.13917E-01	.60830E+00	.66640E+00	.25301E-02
.35000E+00	.71817E+00	.32913E+00	.43053E+00	.61116E+00	.10138E-01	.13408E-01	.55463E+00	.61100E+00	.24740E-02
.40000E+00	.79856E+00	.36009E+00	.47678E+00	.54455E+00	.95034E-02	.12807E-01	.49122E+00	.54552E+00	.24076E-02
.45000E+00	.87005E+00	.38462E+00	.51596E+00	.46769E+00	.87713E-02	.12113E-01	.41804E+00	.46997E+00	.23309E-02
.50000E+00	.93155E+00	.40191E+00	.54850E+00	.38058E+00	.79417E-02	.11327E-01	.33511E+00	.38435E+00	.22441E-02
.55000E+00	.98194E+00	.41118E+00	.57321E+00	.28322E+00	.70145E-02	.10448E-01	.24242E+00	.28866E+00	.21471E-02
THETA= .15708E+01									
0.	0.	0.	0.	0.					
.50000E-01	.12091E+00	.83466E-14	.68813E-01	.79722E+00	.18576E-14	.15306E-01	.72816E+00	.79232E+00	.40877E-15
.10000E+00	.24063E+00	.16568E-13	.13683E+00	.79243E+00	.18500E-14	.15259E-01	.72314E+00	.78714E+00	.40798E-15
.15000E+00	.35794E+00	.24538E-13	.20326E+00	.77659E+00	.18271E-14	.15118E-01	.70808E+00	.77154E+00	.40562E-15
.20000E+00	.47164E+00	.32132E-13	.26730E+00	.75017E+00	.17890E-14	.14883E-01	.68250E+00	.74567E+00	.40170E-15
.25000E+00	.58054E+00	.39224E-13	.32816E+00	.71320E+00	.17356E-14	.14554E-01	.64785E+00	.70939E+00	.39620E-15
.30000E+00	.68343E+00	.45689E-13	.38505E+00	.66565E+00	.16670E-14	.14132E-01	.60267E+00	.66274E+00	.38913E-15
.35000E+00	.77911E+00	.51401E-13	.43717E+00	.60755E+00	.15832E-14	.13615E-01	.54745E+00	.60572E+00	.38049E-15
.40000E+00	.86638E+00	.56235E-13	.48372E+00	.53888E+00	.14841E-14	.13004E-01	.48219E+00	.53834E+00	.37028E-15
.45000E+00	.94403E+00	.60065E-13	.52352E+00	.45964E+00	.13698E-14	.12300E-01	.40690E+00	.46060E+00	.35849E-15
.50000E+00	.10109E+01	.62767E-13	.55696E+00	.36984E+00	.12403E-14	.11501E-01	.32156E+00	.37248E+00	.34514E-15
.55000E+00	.10657E+01	.64213E-13	.58205E+00	.25947E+00	.10954E-14	.10609E-01	.22619E+00	.27400E+00	.33621E-15
THETA= .17453E+01									
0.	0.	0.	0.	0.					
.50000E-01	.11148E+00	.53446E-01	.67767E-01	.79562E+00	.11895E-01	.15073E-01	.73026E+00	.79232E+00	.26578E-02
.10000E+00	.22185E+00	.10609E+00	.13475E+00	.79049E+00	.11846E-01	.15027E-01	.72538E+00	.78728E+00	.26527E-02
.15000E+00	.33000E+00	.15712E+00	.20017E+00	.77512E+00	.11699E-01	.14888E-01	.71074E+00	.77217E+00	.26374E-02
.20000E+00	.43482E+00	.20575E+00	.26324E+00	.74950E+00	.11455E-01	.14657E-01	.68635E+00	.74699E+00	.26119E-02
.25000E+00	.53520E+00	.25116E+00	.32318E+00	.71364E+00	.11114E-01	.14333E-01	.65220E+00	.71173E+00	.25761E-02
.30000E+00	.63002E+00	.29256E+00	.37920E+00	.66752E+00	.10675E-01	.13917E-01	.60830E+00	.66640E+00	.25301E-02
.35000E+00	.71817E+00	.32913E+00	.43053E+00	.61116E+00	.10138E-01	.13408E-01	.55463E+00	.61100E+00	.24740E-02
.40000E+00	.79856E+00	.36009E+00	.47678E+00	.54755E+00	.95034E-02	.12807E-01	.49122E+00	.54552E+00	.24076E-02
.45000E+00	.87005E+00	.38462E+00	.51596E+00	.46769E+00	.87713E-02	.12113E-01	.41804E+00	.46997E+00	.23309E-02
.50000E+00	.93155E+00	.40191E+00	.54850E+00	.38058E+00	.79417E-02	.11326E-01	.33511E+00	.38435E+00	.22441E-02
.55000E+00	.98194E+00	.41118E+00	.57321E+00	.28322E+00	.70145E-02	.10448E-01	.24242E+00	.28866E+00	.21471E-02
THETA= .19199E+01									
0.	0.	0.	0.	0.					
.50000E-01	.84323E-01	.10044E+00	.64663E-01	.78959E+00	.22355E-01	.14383E-01	.73630E+00	.79232E+00	.52349E-02
.10000E+00	.16780E+00	.19938E+00	.12858E+00	.78491E+00	.22263E-01	.14339E-01	.73183E+00	.73770E+00	.52248E-02
.15000E+00	.24957E+00	.29530E+00	.19100E+00	.77091E+00	.21988E-01	.14206E-01	.71841E+00	.77386E+00	.51947E-02
.20000E+00	.32880E+00	.38668E+00	.25118E+00	.74757E+00	.21529E-01	.13986E-01	.69605E+00	.75079E+00	.51444E-02
.25000E+00	.40464E+00	.47203E+00	.30837E+00	.71490E+00	.20862E-01	.13677E-01	.66475E+00	.71848E+00	.50739E-02
.30000E+00	.47623E+00	.54983E+00	.36183E+00	.67289E+00	.20062E-01	.13279E-01	.62451E+00	.76795E+00	.49834E-02
.35000E+00	.54272E+00	.61857E+00	.41081E+00	.62155E+00	.19053E-01	.12794E-01	.57532E+00	.62619E+00	.48727E-02
.40000E+00	.60327E+00	.67674E+00	.45455E+00	.62155E+00	.17860E-01	.12220E-01	.51719E+00	.56620E+00	.47420E-02
.45000E+00	.65703E+00	.72284E+00	.49232E+00	.56087E+00	.16485E-01	.11558E-01	.45012E+00	.56698E+00	.45911E-02
.50000E+00	.70315E+00	.75535E+00	.52337E+00	.49086E+00	.14925E-01	.10808E-01	.37410E+00	.49653E+00	.44200E-02
.55000E+00	.74078E+00	.77276E+00	.54695E+00	.32283E+00	.13183F-01	.99690E-02	.28914E+00	.33085E+00	.42289E-02
.55000E+00	.74078E+00	.77276E+00	.54695E+00	.22481E+00	.11257E-01	.90421E-02	.19524E+00	.23394E+00	.40176E-02

FEE= .10472E+01  
THETA= 0.

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.72816E+00	0.	0.	.80279E+00	.78725E+00	.13460E-01
.50000E-01	-.19189E+00	0.	0.	.72813E+00	0.	0.	.80244E+00	.78693E+00	.13434E-01
.10000E+00	-.38197E+00	0.	0.	.72806E+00	0.	0.	.80141E+00	.78599E+00	.13356E-01
.15000E+00	-.56843E+00	0.	0.	.72793E+00	0.	0.	.79970E+00	.78442E+00	.13227E-01
.20000E+00	-.74944E+00	0.	0.	.72775E+00	0.	0.	.79729E+00	.78223E+00	.13046E-01
.25000E+00	-.92320E+00	0.	0.	.72752E+00	0.	0.	.79420E+00	.77941E+00	.12813E-01
.30000E+00	-.10879E+01	0.	0.	.72723E+00	0.	0.	.79042E+00	.77596E+00	.12529E-01
.35000E+00	-.12417E+01	0.	0.	.72690E+00	0.	0.	.78596E+00	.77188E+00	.12192E-01
.40000E+00	-.13828E+01	0.	0.	.72651E+00	0.	0.	.78080E+00	.76717E+00	.11804E-01
.45000E+00	-.15094E+01	0.	0.	.72608E+00	0.	0.	.77494E+00	.76184E+00	.11365E-01
.50000E+00	-.16197E+01	0.	0.	.72559E+00	0.	0.	.76844E+00	.75588E+00	.10873E-01
.55000E+00	-.17118E+01	0.	0.	.72505E+00	0.	0.	.76122E+00	.74930E+00	.10330E-01

THETA= .17453E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.73041E+00	.12762E-01	.23373E-02	.80054E+00	.78725E+00	.13255E-01
.50000E-01	-.18177E+00	.57345E-01	.10508E-01	.73023E+00	.12711E-01	.23301E-02	.80005E+00	.78679E+00	.13230E-01
.10000E+00	-.36183E+00	.11384E+00	.20894E-01	.72967E+00	.12556E-01	.23086E-02	.79860E+00	.78541E+00	.13153E-01
.15000E+00	-.53845E+00	.16864E+00	.31038E-01	.72875E+00	.12299E-01	.22727E-02	.79618E+00	.78311E+00	.13026E-01
.20000E+00	-.70991E+00	.22090E+00	.40818E-01	.72746E+00	.11939E-01	.22225E-02	.79280E+00	.7798E+00	.12846E-01
.25000E+00	-.87451E+00	.26976E+00	.50112E-01	.72581E+00	.11475E-01	.21579E-02	.78844E+00	.77576E+00	.12618E-01
.30000E+00	-.10305E+01	.31438E+00	.58799E-01	.72378E+00	.10909E-01	.20790E-02	.78312E+00	.77071E+00	.12338E-01
.35000E+00	-.11762E+01	.35391E+00	.66758E-01	.72139E+00	.10240E-01	.19850E-02	.77683E+00	.76473E+00	.12007E-01
.40000E+00	-.13099E+01	.38750E+00	.73867E-01	.71862E+00	.94684E-02	.18782E-02	.76958E+00	.75784E+00	.11625E-01
.45000E+00	-.14298E+01	.41431E+00	.80004E-01	.71549E+00	.85935E-02	.17563E-02	.76135E+00	.75003E+00	.11192E-01
.50000E+00	-.15343E+01	.43348E+00	.85050E-01	.71199E+00	.76157E-02	.16200E-02	.75216E+00	.74130E+00	.10708E-01
.55000E+00	-.16215E+01	.44416E+00	.88881E-01	.70813E+00	.65349E-02	.14694E-02	.74200E+00	.73165E+00	.10173E-01

THETA= .34907E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.73689E+00	.23985E-01	.46035E-02	.79406E+00	.78725E+00	.12648E-01
.50000E-01	-.15263E+00	.10777E+00	.20697E-01	.73625E+00	.23888E-01	.45894E-02	.79317E+00	.78637E+00	.12624E-01
.10000E+00	-.30382E+00	.21395E+00	.41154E-01	.73433E+00	.23598E-01	.45470E-02	.79051E+00	.78373E+00	.12551E-01
.15000E+00	-.45213E+00	.31694E+00	.61133E-01	.73113E+00	.23114E-01	.44763E-02	.78607E+00	.77933E+00	.12429E-01
.20000E+00	-.59611E+00	.41515E+00	.80395E-01	.72665E+00	.22437E-01	.43775E-02	.77986E+00	.77318E+00	.12259E-01
.25000E+00	-.73431E+00	.50698E+00	.98701E-01	.72088E+00	.21567E-01	.42503E-02	.77187E+00	.76526E+00	.12040E-01
.30000E+00	-.86531E+00	.59084E+00	.11581E+00	.71384E+00	.20503E-01	.40949E-02	.76210E+00	.75559E+00	.11773E-01
.35000E+00	-.98764E+00	.66513E+00	.13149E+00	.70551E+00	.19245E-01	.39113E-02	.75056E+00	.74416E+00	.11457E-01
.40000E+00	-.10999E+01	.72826E+00	.14549E+00	.69591E+00	.17793E-01	.36994E-02	.73725E+00	.73097E+00	.11092E-01
.45000E+00	-.12006E+01	.77864E+00	.15758E+00	.68502E+00	.16150E-01	.34592E-02	.72216E+00	.71602E+00	.10679E-01
.50000E+00	-.12883E+01	.81467E+00	.16752E+00	.67286E+00	.14313E-01	.31908E-02	.70529E+00	.69932E+00	.10217E-01
.55000E+00	-.13616E+01	.83475E+00	.17506E+00	.65941E+00	.12282E-01	.28941E-02	.68665E+00	.68085E+00	.97070E-02

THETA= .52360E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.74682E+00	.32315E-01	.67299E-02	.78413E+00	.78725E+00	.11656E-01
.50000E-01	-.10799E+00	.14520E+00	.30256E-01	.74548E+00	.32184E-01	.67092E-02	.78262E+00	.78572E+00	.11634E-01
.10000E+00	-.21495E+00	.28826E+00	.60163E-01	.74146E+00	.31793E-01	.66472E-02	.77811E+00	.78116E+00	.11567E-01
.15000E+00	-.31988E+00	.42702E+00	.89371E-01	.73476E+00	.31142E-01	.65440E-02	.77354E+00	.77354E+00	.11455E-01
.20000E+00	-.42174E+00	.55933E+00	.11753E+00	.72539E+00	.30230E-01	.63994E-02	.76003E+00	.76289E+00	.11298E-01
.25000E+00	-.51952E+00	.68305E+00	.14429E+00	.71334E+00	.29057E-01	.62135E-02	.74647E+00	.74918E+00	.11096E-01
.30000E+00	-.61220E+00	.79604E+00	.16930E+00	.69861E+00	.27623E-01	.59864E-02	.72990E+00	.73244E+00	.10850E-01
.35000E+00	-.69875E+00	.89613E+00	.19222E+00	.68120E+00	.25929E-01	.57179E-02	.71031E+00	.71266E+00	.10559E-01
.40000E+00	-.77816E+00	.98119E+00	.21262E+00	.66111E+00	.23975E-01	.54081E-02	.68772E+00	.68981E+00	.10223E-01
.45000E+00	-.84941E+00	.10491E+01	.23036E+00	.63834E+00	.21759E-01	.50570E-02	.66211E+00	.66392E+00	.98420E-02
.50000E+00	-.91147E+00	.10976E+01	.24489E+00	.61290E+00	.19284E-01	.46646E-02	.63348E+00	.63499E+00	.94164E-02

0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
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-55000E+00 .93190E+00 .83475E+00 .48098E+00 .22960E+00 .12232E-01 .79515E-02 .19829E+00 .23265E+00 .35331E-02									
THETA= .13963E+01									
0.	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
-50000E-01	0.	0.	0.	80054E+00	.12762E-01	.13255E-01	.73041E+00	.78725E+00	.23373E-02
-10000E+00	.13362E+00	.57345E-01	.59594E-01	.79542E+00	.12711E-01	.13215E-01	.72556E+00	.78224E+00	.23328E-02
-10000E+00	.26597E+00	.11384E+00	.11850E+00	.78005E+00	.12556E-01	.13093E-01	.71099E+00	.76723E+00	.23193E-02
-15000E+00	.39579E+00	.16864E+00	.17603E+00	.75445E+00	.12299E-01	.12889E-01	.68671E+00	.74222E+00	.22968E-02
-20000E+00	.52183E+00	.22090E+00	.23149E+00	.71860E+00	.11939E-01	.12604E-01	.65273E+00	.70719E+00	.22654E-02
-25000E+00	.64281E+00	.26570E+00	.28420E+00	.67251E+00	.11475E-01	.12238E-01	.60903E+00	.66216E+00	.22250E-02
-30000E+00	.75748E+00	.31438E+00	.33347E+00	.61618E+00	.10909E-01	.11791E-01	.55563E+00	.60713E+00	.21756E-02
-35000E+00	.86457E+00	.35391E+00	.37860E+00	.54960E+00	.10240E-01	.11262E-01	.49251E+00	.54208E+00	.21172E-02
-40000E+00	.96281E+00	.38750E+00	.41892E+00	.47279E+00	.94684E-02	.10652E-01	.41968E+00	.46703E+00	.20498E-02
-45000E+00	.10509E+01	.41431E+00	.45373E+00	.38573E+00	.85935E-02	.99603E-02	.33714E+00	.38198E+00	.19734E-02
-50000E+00	.11277E+01	.43348E+00	.48234E+00	.28843E+00	.76157E-02	.91875E-02	.24489E+00	.28692E+00	.18881E-02
-55000E+00	.11919E+01	.44416E+00	.50407E+00	.18088E+00	.65349E-02	.83332E-02	.14294E+00	.18185E+00	.17938E-02
THETA= .15708E+01									
0.	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
-50000E-01	0.	0.	0.	.80279E+00	.19930E-14	.13460E-01	.72816E+00	.78725E+00	.35946E-15
-10000E+00	.14374E+00	.89556E-14	.60513E-01	.79751E+00	.19850E-14	.13418E-01	.72317E+00	.78210E+00	.35877E-15
-15000E+00	.28611E+00	.17779E-13	.12033E+00	.78167E+00	.19609E-14	.13294E-01	.70818E+00	.76665E+00	.35670E-15
-20000E+00	.42577E+00	.26337E-13	.17874E+00	.75527E+00	.19207E-14	.13088E-01	.68320E+00	.74090E+00	.35325E-15
-25000E+00	.56136E+00	.34497E-13	.23506E+00	.71832E+00	.18644E-14	.12799E-01	.64823E+00	.70486E+00	.34841E-15
-30000E+00	.69150E+00	.42128E-13	.28850E+00	.67080E+00	.17921E-14	.12427E-01	.60327E+00	.65852E+00	.34219E-15
-35000E+00	.81485E+00	.49097E-13	.33861E+00	.61272E+00	.17037E-14	.11973E-01	.54833E+00	.60188E+00	.33459E-15
-40000E+00	.93005E+00	.55270E-13	.38444E+00	.54409E+00	.15992E-14	.11436E-01	.48338E+00	.53494E+00	.32561E-15
-45000E+00	.10357E+01	.60516E-13	.42538E+00	.46490E+00	.14787E-14	.10816E-01	.40845E+00	.45770E+00	.31525E-15
-50000E+00	.11306E+01	.64702E-13	.46973E+00	.37514E+00	.13420E-14	.10114E-01	.32353E+00	.37017E+00	.30351E-15
-55000E+00	.12131E+01	.67696E-13	.48978E+00	.27483E+00	.11893E-14	.93292E-02	.22862E+00	.27233E+00	.29038E-15
THETA= .17453E+01									
0.	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
-50000E-01	0.	0.	0.	.80054E+00	.12762E-01	.13255E-01	.73041E+00	.78725E+00	.23373E-02
-10000E+00	.13362E+00	.57345E-01	.59594E-01	.79542E+00	.12711E-01	.13215E-01	.72556E+00	.78224E+00	.23328E-02
-15000E+00	.26597E+00	.11384E+00	.11850E+00	.78005E+00	.12556E-01	.13093E-01	.71099E+00	.76723E+00	.23193E-02
-20000E+00	.39579E+00	.16864E+00	.17603E+00	.75445E+00	.12299E-01	.12889E-01	.68671E+00	.74222E+00	.22968E-02
-25000E+00	.52183E+00	.22090E+00	.23149E+00	.71860E+00	.11939E-01	.12604E-01	.65273E+00	.70719E+00	.22654E-02
-30000E+00	.64281E+00	.26570E+00	.28420E+00	.67251E+00	.11475E-01	.12238E-01	.60903E+00	.66216E+00	.22250E-02
-35000E+00	.75748E+00	.31438E+00	.33347E+00	.61618E+00	.10909E-01	.11791E-01	.55563E+00	.60713E+00	.21756E-02
-40000E+00	.86457E+00	.35391E+00	.37860E+00	.54960E+00	.10240E-01	.11262E-01	.49251E+00	.54208E+00	.21172E-02
-45000E+00	.96281E+00	.38750E+00	.41892E+00	.47279E+00	.94684E-02	.10652E-01	.41968E+00	.46703E+00	.20498E-02
-50000E+00	.10509E+01	.41431E+00	.45373E+00	.38573E+00	.85935E-02	.99603E-02	.33714E+00	.38198E+00	.19734E-02
-55000E+00	.11277E+01	.43348E+00	.48234E+00	.28843E+00	.76157E-02	.91875E-02	.24489E+00	.28692E+00	.18881E-02
THETA= .19199E+01									
0.	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
-50000E-01	0.	0.	0.	.79406E+00	.23985E-01	.12648E-01	.73689E+00	.78725E+00	.40355E-02
-10000E+00	.10447E+00	.10777E+00	.56863E-01	.78939E+00	.23888E-01	.12609E-01	.73244E+00	.78224E+00	.45946E-02
-15000E+00	.20796E+00	.21395E+00	.11307E+00	.77540E+00	.23598E-01	.12493E-01	.71909E+00	.76891E+00	.45681E-02
-20000E+00	.30947E+00	.31694E+00	.16796E+00	.75927E+00	.23114E-01	.12299E-01	.69683E+00	.74599E+00	.45239E-02
-25000E+00	.40802E+00	.41515E+00	.22088E+00	.71942E+00	.22437E-01	.12027E-01	.66567E+00	.71391E+00	.44619E-02
-30000E+00	.50262E+00	.50698E+00	.27118E+00	.67743E+00	.21567E-01	.11678E-01	.62511E+00	.67266E+00	.43823E-02
-35000E+00	.59228E+00	.59084E+00	.31819E+00	.62612E+00	.20503E-01	.11251E-01	.57665E+00	.62224E+00	.42850E-02
-40000E+00	.67601E+00	.66513E+00	.36126E+00	.56547E+00	.19245E-01	.10746E-01	.51878E+00	.56266E+00	.41700E-02
-45000E+00	.75282E+00	.72826E+00	.39973E+00	.49550E+00	.17795E-01	.10164E-01	.45201E+00	.49390E+00	.40373E-02
-50000E+00	.82174E+00	.77864E+00	.43294E+00	.41620E+00	.16150E-01	.95041E-02	.37634E+00	.41598E+00	.38869E-02
-55000E+00	.88176E+00	.81467E+00	.45024E+00	.32756E+00	.14313E-01	.87666E-02	.29176E+00	.32890E+00	.37188E-02
THETA= .21199E+01									
0.	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
-50000E-01	0.	0.	0.	.79406E+00	.23985E-01	.12648E-01	.73689E+00	.78725E+00	.40355E-02
-10000E+00	.10447E+00	.10777E+00	.56863E-01	.78939E+00	.23888E-01	.12609E-01	.73244E+00	.78224E+00	.45946E-02
-15000E+00	.20796E+00	.21395E+00	.11307E+00	.77540E+00	.23598E-01	.12493E-01	.71909E+00	.76891E+00	.45681E-02
-20000E+00	.30947E+00	.31694E+00	.16796E+00	.75927E+00	.23114E-01	.12299E-01	.69683E+00	.74599E+00	.45239E-02
-25000E+00	.40802E+00	.41515E+00	.22088E+00	.71942E+00	.22437E-01	.12027E-01	.66567E+00	.71391E+00	.44619E-02
-30000E+00	.50262E+00	.50698E+00	.27118E+00	.67743E+00	.21567E-01	.11678E-01	.62511E+00	.67266E+00	.43823E-02
-35000E+00	.59228E+00	.59084E+00	.31819E+00	.62612E+00	.20503E-01	.11251E-01	.57665E+00	.62224E+00	.42850E-02
-40000E+00	.67601E+00	.66513E+00	.36126E+00	.56547E+00	.19245E-01	.10746E-01	.51878E+00	.56266E+00	.41700E-02
-45000E+00	.75282E+00	.72826E+00	.39973E+00	.49550E+00	.17795E-01	.10164E-01	.45201E+00	.49390E+00	.40373E-02
-50000E+00	.82174E+00	.77864E+00	.43294E+00	.41620E+00	.16150E-01	.95041E-02	.37634E+00	.41598E+00	.38869E-02
-55000E+00	.88176E+00	.81467E+00	.45024E+00	.32756E+00	.14313E-01	.87666E-02	.29176E+00	.32890E+00	.37188E-02
THETA= .23199E+01									
0.	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
-50000E-01	0.	0.	0.	.79406E+00	.23985E-01	.12648E-01	.73689E+00	.78725E+00	.40355E-02
-10000E+00	.10447E+00	.10777E+00	.56863E-01	.78939E+00	.23888E-01	.12609E-01	.73244E+00	.78224E+00	.45946E-02
-15000E+00	.20796E+00	.21395E+00	.11307E+00	.77540E+00	.23598E-01	.12493E-01	.71909E+00	.76891E+00	.45681E-02
-20000E+00	.30947E+00	.31694E+00	.16796E+00	.75927E+00	.23114E-01	.12299E-01	.69683E+00	.74599E+00	.45239E-02
-25000E+00	.40802E+00	.41515E+00	.22088E+00	.71942E+00	.22437E-01	.12027E-01	.66567E+00	.71391E+00	.44619E-02
-30000E+00	.50262E+00	.50698E+00	.27118E+00	.67743E+00	.21567E-01	.11678E-01	.62511E+00	.67266E+00	.43823E-02
-35000E+00	.59228E+00	.59084E+00	.31819E+00	.62612E+00	.20503E-01	.11251E-01	.57665E+00	.62224E+00	.42850E-02
-40000E+00	.67601E+00	.66513E+00	.36126E+00	.56547E+00	.19245E-01	.10746E-01	.51878E+00	.56266E+00	.41700E-02
-45000E+00	.75282E+00	.72826E+00	.39973E+00	.49550E+00	.17795E-01	.10164E-01	.45201E+00	.49390E+00	.40373E-02
-50000E+00	.82174E+00	.77864E+00	.43294E+00	.41620E+00	.16150E-01	.95041E-02	.37634E+00	.41598E+00	.38869E-02
-55000E+00	.88176E+00	.81467E+00	.45024E+00	.32756E+00	.14313E-01	.87666E-02	.29176E+00	.32890E+00	.37188E-02
THETA= .25199E+01									
0.	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
-50000E-01	0.	0.	0.	.79406E+00	.23985E-01	.12648E-01	.73689E+00	.78725E+00	.40355E-02
-10000E+00	.10447E+00	.10777E+00	.56863E-01	.78939E+00	.23888E-01	.12609E-01	.73244E+00	.78224E+00	.45946E-02
-15000E+00	.20796E+00	.21395E+00	.11307E+00	.77540E+00	.23598E-01	.12493E-01	.71909E+00	.76891E+00	.45681E-02
-20000E+00	.30947E+00	.31694E+00	.16796E+00	.75927E+00	.23114E-01	.12299E-01	.69683E+00	.74599E+00	.45239E-02
-25000E+00	.40802E+00	.41515E+00	.22088E+00	.71942E+00	.22437E-01	.12027E-01	.66567E+00	.71391E+00	.44619E-02
-30000E+00	.50262E+00	.50698E+00	.27118E+00	.67743E+00	.21567E-01	.11678E-01	.62511E+00	.67266E+00	.43823E-02
-35000E+00	.59228E+00	.59084E+00	.31819E+00	.62612E+00	.20503E-01	.11251E-01	.57665E+00	.62224E+00	.42850E-02
-40000E+00	.67601E+00	.66513E+00	.36126E+00	.56547E+00	.19245E-01	.10746E-01	.51878E+00	.56266E+00	.41700E-02
-45000E+00	.75282E+00	.72826E+00	.39973E+00	.49550E+00	.17795E-01	.10164E-01	.45201E+00	.49390E+00	.40373E-02
-50000E+00	.82174E+00	.77864E+00	.43294E+00	.41620E+00	.16150E-01	.95041E-02	.37634E+00	.41598E+00	.38869E-02

FFE= .12217E+01  
THETA= 0.

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	-72816E+00	0.	0.	-80692E+00	-73311E+00	-99902E-02
.50000E-01	-.19189E+00	0.	0.	-72813E+00	0.	0.	-80657E+00	-72811E+00	-99710E-02
.10000E+00	-.38197E+00	0.	0.	-72806E+00	0.	0.	-80552E+00	-78189E+00	-99134E-02
.15000E+00	-.56843E+00	0.	0.	-72793E+00	0.	0.	-80376E+00	-78036E+00	-98174E-02
.20000E+00	-.74944E+00	0.	0.	-72775E+00	0.	0.	-80130E+00	-77822E+00	-96830E-02
.25000E+00	-.92320E+00	0.	0.	-72752E+00	0.	0.	-79814E+00	-77547E+00	-95102E-02
.30000E+00	-.10879E+01	0.	0.	-72723E+00	0.	0.	-79427E+00	-77211E+00	-92990E-02
.35000E+00	-.12417E+01	0.	0.	-72690E+00	0.	0.	-78970E+00	-76813E+00	-90495E-02
.40000E+00	-.13828E+01	0.	0.	-72651E+00	0.	0.	-78443E+00	-76355E+00	-87615E-02
.45000E+00	-.15094E+01	0.	0.	-72608E+00	0.	0.	-77845E+00	-75835E+00	-84351E-02
.50000E+00	-.16197E+01	0.	0.	-72559E+00	0.	0.	-77178E+00	-75254E+00	-80703E-02
.55000E+00	-.17118E+01	0.	0.	-72505E+00	0.	0.	-76440E+00	-74612E+00	-76672E-02

THETA= .17453E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	-73054E+00	-13469E-01	-17348E-02	-80455E+00	-78311E+00	-98384E-02
.50000E-01	-.18121E+00	-.60524E-01	.77993E-02	-73035E+00	-13416E-01	-17295E-02	-80408E+00	-78266E+00	-98195E-02
.10000E+00	-.36071E+00	-1.2016E+00	.15508E-01	-72980E+00	-13255E-01	-17135E-02	-80258E+00	-78131E+00	-97628E-02
.15000E+00	-.53678E+00	-1.7803E+00	.23037E-01	-72888E+00	-12986E-01	-16869E-02	-80013E+00	-77905E+00	-96682E-02
.20000E+00	-.70771E+00	-2.3325E+00	.30296E-01	-72759E+00	-12611E-01	-16496E-02	-79666E+00	-77590E+00	-95359E-02
.25000E+00	-.87178E+00	-2.8492E+00	.37194E-01	-72593E+00	-12128E-01	-16017E-02	-79228E+00	-77184E+00	-93657E-02
.30000E+00	-.10273E+01	-3.3217E+00	.43642E-01	-72391E+00	-11538E-01	-15431E-02	-78688E+00	-76688E+00	-91578E-02
.35000E+00	-.11725E+01	-3.7411E+00	.49549E-01	-72152E+00	-10841E-01	-14739E-02	-78049E+00	-76102E+00	-89120E-02
.40000E+00	-.13057E+01	-4.0985E+00	.54826E-01	-71875E+00	-10037E-01	-13941E-02	-77313E+00	-75425E+00	-86284E-02
.45000E+00	-.14252E+01	-4.3851E+00	.59381E-01	-71562E+00	-91248E-02	-13036E-02	-76479E+00	-74659E+00	-83070E-02
.50000E+00	-.15293E+01	-4.5921E+00	.63126E-01	-71213E+00	-81058E-02	-12024E-02	-75546E+00	-73802E+00	-79477E-02
.55000E+00	-.16162E+01	-4.7105E+00	.65970E-01	-70826E+00	-69795E-02	-10906E-02	-74515E+00	-72855E+00	-75507E-02

THETA= .34907E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	-73737E+00	-25314E-01	-34168E-02	-79771E+00	-78311E+00	-93877E-02
.50000E-01	-.15046E+00	-1.1375E+00	.15362E-01	-73673E+00	-25213E-01	-34064E-02	-79682E+00	-78224E+00	-93696E-02
.10000E+00	-.29949E+00	-2.2583E+00	.30544E-01	-73418E+00	-24910E-01	-33749E-02	-79414E+00	-77964E+00	-93155E-02
.15000E+00	-.44566E+00	-3.3459E+00	.45375E-01	-73161E+00	-24407E-01	-33225E-02	-78968E+00	-77529E+00	-92253E-02
.20000E+00	-.58755E+00	-4.3836E+00	.59672E-01	-72713E+00	-23701E-01	-32491E-02	-78343E+00	-76921E+00	-90990E-02
.25000E+00	-.72373E+00	-5.3547E+00	.73259E-01	-72137E+00	-22794E-01	-31547E-02	-77540E+00	-76139E+00	-89367E-02
.30000E+00	-.85277E+00	-6.2427E+00	.85958E-01	-71433E+00	-21685E-01	-30394E-02	-76558E+00	-75183E+00	-87382E-02
.35000E+00	-.97325E+00	-7.0309E+00	.97593E-01	-70601E+00	-20375E-01	-29030E-02	-75398E+00	-74053E+00	-85037E-02
.40000E+00	-.10837E+01	-7.7026E+00	.10799E+00	-69641E+00	-18863E-01	-27458E-02	-74060E+00	-72749E+00	-82331E-02
.45000E+00	-.11828E+01	-8.2413E+00	.11696E+00	-68553E+00	-17149E-01	-25675E-02	-72543E+00	-71272E+00	-79264E-02
.50000E+00	-.12690E+01	-8.6303E+00	.12433E+00	-67337E+00	-15234E-01	-23683E-02	-70847E+00	-69621E+00	-75836E-02
.55000E+00	-.13409E+01	-8.8529E+00	.12994E+00	-65993E+00	-13117E-01	-21481E-02	-68973E+00	-67796E+00	-72048E-02

THETA= .52360E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	-74785E+00	-34105E-01	-49951E-02	-78723E+00	-74311E+00	-86517E-02
.50000E-01	-.10334E+00	-1.5325E+00	.22457E-01	-74651E+00	-33969E-01	-49798E-02	-78572E+00	-74160E+00	-86351E-02
.10000E+00	-.20568E+00	-3.0426E+00	.44655E-01	-74250E+00	-33562E-01	-49338E-02	-78120E+00	-73707E+00	-85852E-02
.15000E+00	-.30605E+00	-4.5079E+00	.63234E-01	-73580E+00	-32883E-01	-48571E-02	-77366E+00	-72896E+00	-85021E-02
.20000E+00	-.40346E+00	-5.9060E+00	.87234E-01	-72643E+00	-31932E-01	-47498E-02	-76311E+00	-71589E+00	-83857E-02
.25000E+00	-.49691E+00	-7.2144E+00	.10710E+00	-71439E+00	-30710E-01	-46119E-02	-74954E+00	-70537E+00	-82361E-02
.30000E+00	-.58542E+00	-8.4108E+00	.12566E+00	-69966E+00	-29216E-01	-44432E-02	-73296E+00	-6914E+00	-80532E-02
.35000E+00	-.66799E+00	-9.4727E+00	.14267E+00	-68226E+00	-27451E-01	-42406E-02	-71336E+00	-67014E+00	-78371E-02
.40000E+00	-.74365E+00	-1.0378E+01	.15786E+00	-66218E+00	-25414E-01	-40140E-02	-69075E+00	-64650E+00	-75877E-02
.45000E+00	-.81140E+00	-1.1103E+01	.17098E+00	-63942E+00	-23105E-01	-37534E-02	-66512E+00	-6083E+00	-73050E-02
.50000E+00	-.87025E+00	-1.1628E+01	.18176E+00	-61399E+00	-20525E-01	-34622E-02	-63648E+00	-56215E+00	-69891E-02

55000E+00	-91921E+00	11927E+01	18995E+00	58588E+00	17673E-01	31403E-02	60482E+00	60045E+00	66400E-02
THETA=	.69813E+00								
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000E-01	-45533E-01	17427E+00	28370E-01	76070E+00	38783E-01	64216E-02	77438E+00	78311E+00	76529E-02
10000E+00	-90616E-01	34600E+00	57407E-01	75851E+00	38628E-01	64018E-02	77212E+00	78082E+00	76382E-02
15000E+00	-13480E+00	51262E+00	85277E-01	75192E+00	38165E-01	63427E-02	76533E+00	77393E+00	75941E-02
20000E+00	-17763E+00	67161E+00	11215E+00	74094E+00	37393E-01	62442E-02	75402E+00	76245E+00	75206E-02
25000E+00	-21867E+00	82039E+00	13768E+00	72558E+00	36312E-01	61063E-02	73819E+00	74638E+00	74176E-02
30000E+00	-25745E+00	95644E+00	16155E+00	70582E+00	34922E-01	59289E-02	71783E+00	72573E+00	72852E-02
35000E+00	-29345E+00	10772E+01	18342E+00	68167E+00	33223E-01	69295E+00	70048E+00	70048E+00	71235E-02
40000E+00	-32647E+00	11801E+01	20295E+00	65312E+00	31216E-01	54559E-02	66354E+00	67064E+00	69323E-02
45000E+00	-35581E+00	12626E+01	21981E+00	62019E+00	28899E-01	51607E-02	62961E+00	63620E+00	67117E-02
50000E+00	-38101E+00	13222E+01	23367E+00	58287E+00	26274E-01	48253E-02	59115E+00	59718E+00	64617E-02
55000E+00	-40188E+00	13563E+01	25415E+00	54115E+00	23340E-01	44509E-02	54817E+00	55357E+00	61822E-02
THETA=	.87266E+00								
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000E-01	15979E-01	17427E+00	34600E-01	77438E+00	38783E-01	76529E-02	75070E+00	78311E+00	64216E-02
10000E+00	31835E-01	34600E+00	68415E-01	77127E+00	38628E-01	76294E-02	75764E+00	77998E+00	64092E-02
15000E+00	47444E-01	51262E+00	10163E+00	76195E+00	38165E-01	75590E-02	74844E+00	77058E+00	63722E-02
20000E+00	62683E-01	67161E+00	13365E+00	74641E+00	37393E-01	74415E-02	73312E+00	75493E+00	63105E-02
25000E+00	77430E-01	82039E+00	16408E+00	72466E+00	36312E-01	72771E-02	71166E+00	73300E+00	62241E-02
30000E+00	91559E-01	95644E+00	19253E+00	69670E+00	34922E-01	70658E-02	68408E+00	70482E+00	61130E-02
35000E+00	10495E+00	10772E+01	21859E+00	66251E+00	33223E-01	68074E-02	65036E+00	67037E+00	59773E-02
40000E+00	11748E+00	11801E+01	24186E+00	62212E+00	31216E-01	65021E-02	61052E+00	62966E+00	58169E-02
45000E+00	12902E+00	12626E+01	26196E+00	57551E+00	28899E-01	61499E-02	56454E+00	58269E+00	56318E-02
50000E+00	13945E+00	13222E+01	27848E+00	52268E+00	26274E-01	57506E-02	51244E+00	52945E+00	54220E-02
55000E+00	14865E+00	13563E+01	29102E+00	46364E+00	23340E-01	53044E-02	45420E+00	46995E+00	51875E-02
THETA=	.10472E+01								
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000E-01	73782E-01	15325E+00	38897E-01	78723E+00	34105E-01	86517E-02	74785E+00	78311E+00	49951E-02
10000E+00	14690E+00	30426E+00	77344E-01	78327E+00	33969E-01	86252E-02	74403E+00	77919E+00	49855E-02
15000E+00	21870E+00	45079E+00	11489E+00	77138E+00	33562E-01	85455E-02	73257E+00	76744E+00	49567E-02
20000E+00	28851E+00	59060E+00	15109E+00	75155E+00	32883E-01	84128E-02	71348E+00	74785E+00	49087E-02
25000E+00	35567E+00	72144E+00	18550E+00	72380E+00	31932E-01	82269E-02	68674E+00	72043E+00	48415E-02
30000E+00	41952E+00	84108E+00	21765E+00	68812E+00	30710E-01	79880E-02	65236E+00	68518E+00	47551E-02
35000E+00	47940E+00	94727E+00	24711E+00	64452E+00	29216E-01	76959E-02	61035E+00	64208E+00	46495E-02
40000E+00	53465E+00	10378E+01	27343E+00	59298E+00	27451E-01	73508E-02	56069E+00	59116E+00	45247E-02
45000E+00	58460E+00	11103E+01	29615E+00	53352E+00	25414E-01	69525E-02	50340E+00	53239E+00	43807E-02
50000E+00	62860E+00	11628E+01	31483E+00	46612E+00	23109E-01	65012E-02	43846E+00	46580E+00	42176E-02
55000E+00	66598E+00	11927E+01	32901E+00	39083E+00	20525E-01	59967E-02	36589E+00	39137E+00	40352E-02
THETA=	.12217E+01								
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000E-01	12090E+00	11375E+00	42206E-01	79771E+00	25314E-01	93877E-02	73737E+00	78311E+00	34168E-02
10000E+00	24070E+00	22583E+00	83924E-01	79305E+00	25213E-01	93589E-02	73294E+00	77855E+00	34103E-02
15000E+00	35830E+00	33459E+00	12467E+00	77506E+00	24910E-01	92725E-02	71964E+00	76488E+00	33906E-02
20000E+00	47260E+00	43836E+00	16395E+00	72310E+00	24407E-01	91284E-02	69746E+00	74209E+00	33577E-02
25000E+00	58249E+00	53547E+00	20128E+00	68114E+00	23701E-01	89267E-02	66442E+00	71018E+00	33118E-02
30000E+00	68688E+00	62427E+00	23617E+00	62985E+00	22794E-01	86675E-02	62651E+00	66916E+00	32527E-02
35000E+00	78466E+00	70309E+00	26813E+00	56923E+00	21685E-01	83506E-02	57772E+00	61902E+00	31805E-02
40000E+00	87474E+00	77026E+00	29669E+00	49929E+00	20375E-01	79761E-02	52007E+00	55977E+00	30951E-02
45000E+00	95600E+00	82413E+00	32134E+00	49929E+00	18863E-01	75439E-02	45355E+00	49140E+00	29966E-02
50000E+00	10274E+01	86303E+00	34161E+00	42002E+00	17149E-01	70542E-02	37816E+00	41391E+00	28850E-02
55000E+00	10274E+01	86303E+00	34161E+00	33142E+00	15234E-01	65068E-02	29390E+00	32731E+00	27602E-02

55000E+00	10877E+01	88529E+00	35699E+00	23350E+00	13117E-01	59018E-02	20077E+00	23159E+00	26223E-02
THETA=	13963E+01								
R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	80455E+00	13469E-01	98384E-02	73054E+00	78311E+00	17348E-02
50000E-01	15166E+00	60524E-01	44232E-01	79943E+00	13416E-01	98082E-02	72570E+00	77814E+00	17314E-02
10000E+00	30193E+00	12016E+00	87953E-01	78407E+00	13255E-01	97176E-02	71119E+00	76321E+00	17214E-02
15000E+00	44943E+00	17803E+00	13065E+00	75848E+00	12986E-01	95667E-02	68701E+00	73833E+00	17048E-02
20000E+00	59276E+00	23325E+00	17182E+00	72265E+00	12611E-01	93553E-02	65316E+00	70349E+00	16814E-02
25000E+00	73054E+00	28492E+00	21094E+00	67658E+00	12128E-01	90836E-02	60963E+00	65871E+00	16514E-02
30000E+00	86139E+00	33217E+00	24751E+00	62027E+00	11538E-01	87515E-02	55643E+00	60397E+00	16148E-02
35000E+00	98391E+00	37411E+00	28101E+00	55373E+00	10841E-01	83590E-02	49356E+00	53928E+00	15714E-02
40000E+00	10967E+01	40985E+00	31093E+00	47694E+00	10037E-01	79061E-02	42102E+00	46464E+00	15214E-02
45000E+00	11984E+01	43851E+00	33677E+00	38902E+00	91248E-02	73928E-02	33880E+00	38004E+00	14647E-02
50000E+00	12876E+01	45921E+00	35801E+00	29267E+00	81058E-02	68192E-02	24692E+00	28550E+00	14014E-02
55000E+00	13630E+01	47105E+00	37413E+00	18517E+00	69795E-02	61852E-02	14536E+00	18100E+00	13314E-02
THETA=	15708E+01								
R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	80692E+00	21035E-14	99902E-02	72816E+00	78311E+00	26680E-15
50000E-01	16234E+00	94521E-14	44914E-01	80165E+00	20951E-14	99595E-02	72319E+00	77799E+00	26629E-15
10000E+00	32319E+00	18766E-13	89310E-01	78581E+00	20700E-14	98675E-02	70826E+00	76263E+00	26475E-15
15000E+00	48107E+00	27803E-13	13267E+00	75943E+00	20281E-14	97142E-02	68338E+00	73702E+00	26219E-15
20000E+00	63449E+00	36426E-13	17447E+00	72249E+00	19695E-14	94996E-02	64855E+00	70117E+00	25860E-15
25000E+00	78196E+00	44496E-13	21419E+00	67498E+00	18941E-14	92237E-02	60377E+00	65508E+00	25399E-15
30000E+00	92199E+00	51875E-13	25133E+00	61694E+00	18019E-14	88865E-02	54904E+00	59874E+00	24835E-15
35000E+00	10531E+01	58424E-13	28534E+00	54836E+00	15930E-14	84879E-02	48435E+00	53216E+00	24168E-15
40000E+00	11738E+01	64006E-13	31973E+00	46918E+00	15674E-14	80281E-02	40972E+00	45534E+00	23399E-15
45000E+00	12826E+01	68482E-13	34195E+00	37947E+00	14250E-14	75069E-02	32513E+00	36828E+00	22527E-15
50000E+00	13780E+01	71714E-13	36353E+00	27921E+00	12659E-14	69244E-02	23060E+00	27097E+00	21553E-15
55000E+00	14586E+01	73564E-13	37991E+00	16838E+00	10900E-14	62806E-02	12611E+00	16343E+00	20476E-15
THETA=	17453E+01								
R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	80455E+00	13469E-01	98384E-02	73054E+00	78311E+00	17348E-02
50000E-01	15166E+00	60524E-01	44232E-01	79943E+00	13416E-01	98082E-02	72570E+00	77814E+00	17314E-02
10000E+00	30193E+00	12016E+00	87953E-01	78407E+00	13255E-01	97176E-02	71119E+00	76321E+00	17214E-02
15000E+00	44943E+00	17803E+00	13065E+00	75848E+00	12986E-01	95667E-02	68701E+00	73833E+00	17048E-02
20000E+00	59276E+00	23325E+00	17182E+00	72265E+00	12611E-01	93553E-02	65316E+00	70349E+00	16814E-02
25000E+00	73054E+00	28492E+00	21094E+00	67658E+00	12128E-01	90836E-02	60963E+00	65871E+00	16514E-02
30000E+00	86139E+00	33217E+00	24751E+00	62027E+00	11538E-01	87515E-02	55643E+00	60397E+00	16148E-02
35000E+00	98391E+00	37411E+00	28101E+00	55373E+00	10841E-01	83590E-02	49356E+00	53928E+00	15714E-02
40000E+00	10967E+01	40985E+00	31093E+00	47694E+00	10037E-01	79061E-02	42102E+00	46464E+00	15214E-02
45000E+00	11984E+01	43851E+00	33677E+00	38902E+00	91248E-02	73928E-02	33880E+00	38004E+00	14647E-02
50000E+00	12876E+01	45921E+00	35801E+00	29267E+00	81058E-02	68192E-02	24692E+00	28550E+00	14014E-02
55000E+00	13630E+01	47105E+00	37413E+00	18517E+00	69795E-02	61852E-02	14536E+00	18100E+00	13314E-02
THETA=	19199E+01								
R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	79771E+00	25314E-01	93877E-02	73737E+00	78311E+00	34168E-02
50000E-01	12090E+00	11375E+00	42206E-01	79305E+00	25213E-01	93589E-02	73294E+00	77855E+00	34103E-02
10000E+00	24070E+00	22583E+00	83924E-01	77906E+00	24910E-01	92725E-02	71964E+00	76488E+00	33906E-02
15000E+00	35830E+00	33459E+00	12467E+00	75574E+00	24607E-01	91284E-02	69746E+00	74209E+00	33577E-02
20000E+00	47260E+00	43836E+00	16395E+00	72310E+00	23701E-01	89267E-02	66642E+00	71018E+00	33118E-02
25000E+00	58249E+00	53547E+00	20128E+00	68114E+00	22794E-01	86675E-02	62515E+00	66916E+00	32527E-02
30000E+00	68688E+00	62427E+00	23617E+00	62985E+00	21685E-01	83506E-02	57772E+00	61902E+00	31805E-02
35000E+00	78466E+00	70309E+00	26813E+00	56923E+00	20375E-01	79761E-02	52007E+00	55977E+00	30951E-02
40000E+00	87474E+00	77026E+00	29669E+00	49929E+00	18863E-01	75439E-02	45355E+00	49140E+00	29966E-02
45000E+00	95600E+00	82413E+00	32134E+00	42002E+00	17149E-01	70542E-02	37816E+00	41391E+00	28850E-02
50000E+00	10274E+01	86303E+00	34161E+00	33142E+00	15234E-01	65068E-02	29390E+00	32731E+00	27602E-02
55000E+00	10877E+01	88529E+00	35699E+00	23350E+00	13117E-01	59018E-02	20077E+00	23159E+00	26223E-02



FEE= .13963E+01  
THETA= 0.

R	U8AR	V8AR	W8AR	SIRR	SIRT	SIRF	SITI	SIFF	SITF
0.	0.	0.	0.	.72816E+00	0.	0.	.80927E+00	.78041E+00	.53157E-02
.50000E-01	-.19189E+00	0.	0.	.72813E+00	0.	0.	.80927E+00	.78041E+00	.53054E-02
.10000E+00	-.38197E+00	0.	0.	.72806E+00	0.	0.	.80820E+00	.77921E+00	.52748E-02
.15000E+00	-.56843E+00	0.	0.	.72793E+00	0.	0.	.80641E+00	.77771E+00	.52237E-02
.20000E+00	-.74944E+00	0.	0.	.72775E+00	0.	0.	.80392E+00	.77560E+00	.51522E-02
.25000E+00	-.92320E+00	0.	0.	.72752E+00	0.	0.	.80071E+00	.77290E+00	.50603E-02
.30000E+00	-.10879E+01	0.	0.	.72723E+00	0.	0.	.79678E+00	.76959E+00	.49479E-02
.35000E+00	-.12417E+01	0.	0.	.72690E+00	0.	0.	.79215E+00	.76569E+00	.48151E-02
.40000E+00	-.13828E+01	0.	0.	.72651E+00	0.	0.	.78680E+00	.76118E+00	.46619E-02
.45000E+00	-.15094E+01	0.	0.	.72608E+00	0.	0.	.78073E+00	.75607E+00	.44882E-02
.50000E+00	-.16197E+01	0.	0.	.72559E+00	0.	0.	.77396E+00	.75036E+00	.42941E-02
.55000E+00	-.17118E+01	0.	0.	.72505E+00	0.	0.	.76647E+00	.74405E+00	.40796E-02

THETA= .17453E+00

R	U8AR	V8AR	W8AR	SIRR	SIRT	SIRF	SITI	SIFF	SITF
0.	0.	0.	0.	.73062E+00	.13931E-01	.92305E-03	.80717E+00	.78041E+00	.52349E-02
.50000E-01	-.18085E+00	.62599E-01	.41499E-02	.73043E+00	.13876E-01	.92022E-03	.80667E+00	.77997E+00	.52248E-02
.10000E+00	-.35998E+00	.12429E+00	.82519E-02	.72988E+00	.13710E-01	.91172E-03	.80518E+00	.77863E+00	.51947E-02
.15000E+00	-.53569E+00	.18416E+00	.12258E-01	.72896E+00	.13435E-01	.89756E-03	.80271E+00	.77640E+00	.51444E-02
.20000E+00	-.70627E+00	.24131E+00	.16120E-01	.72767E+00	.13050E-01	.87773E-03	.79924E+00	.77329E+00	.50739E-02
.25000E+00	-.87000E+00	.29482E+00	.19791E-01	.72602E+00	.12554E-01	.85224E-03	.79478E+00	.76928E+00	.49834E-02
.30000E+00	-.10252E+01	.34378E+00	.23222E-01	.72399E+00	.11949E-01	.82108E-03	.78933E+00	.76438E+00	.48727E-02
.35000E+00	-.11701E+01	.38729E+00	.26365E-01	.72160E+00	.11233E-01	.78425E-03	.78288E+00	.75859E+00	.47420E-02
.40000E+00	-.13030E+01	.42443E+00	.29172E-01	.71884E+00	.10407E-01	.74176E-03	.77545E+00	.75191E+00	.45911E-02
.45000E+00	-.14222E+01	.45431E+00	.31596E-01	.71571E+00	.94716E-02	.69361E-03	.76703E+00	.74434E+00	.44200E-02
.50000E+00	-.15260E+01	.47600E+00	.33589E-01	.71221E+00	.84257E-02	.63979E-03	.75761E+00	.73588E+00	.42289E-02
.55000E+00	-.16127E+01	.48860E+00	.35102E-01	.70835E+00	.72696E-02	.58030E-03	.74721E+00	.72653E+00	.40176E-02

THETA= .34907E+00

R	U8AR	V8AR	W8AR	SIRR	SIRT	SIRF	SITI	SIFF	SITF
0.	0.	0.	0.	.71769E+00	.26181E-01	.18181E-02	.80009E+00	.78041E+00	.49951E-02
.50000E-01	-.14904E+00	.11765E+00	.81737E-02	.73705E+00	.26078E-01	.18125E-02	.79920E+00	.77955E+00	.49855E-02
.10000E+00	-.29665E+00	.23359E+00	.16253E-01	.73513E+00	.25767E-01	.17957E-02	.79651E+00	.77696E+00	.49567E-02
.15000E+00	-.44144E+00	.34611E+00	.24143E-01	.73193E+00	.25250E-01	.17678E-02	.79203E+00	.77265E+00	.49087E-02
.20000E+00	-.58197E+00	.45351E+00	.31751E-01	.72745E+00	.24526E-01	.17288E-02	.78577E+00	.76673E+00	.48415E-02
.25000E+00	-.71682E+00	.55407E+00	.38980E-01	.72169E+00	.23595E-01	.16786E-02	.77771E+00	.75811E+00	.47551E-02
.30000E+00	-.84459E+00	.64609E+00	.45737E-01	.71465E+00	.22457E-01	.16172E-02	.76796E+00	.74937E+00	.46495E-02
.35000E+00	-.96385E+00	.72786E+00	.51928E-01	.70634E+00	.21112E-01	.15447E-02	.75622E+00	.73816E+00	.45247E-02
.40000E+00	-.10732E+01	.79768E+00	.57458E-01	.69674E+00	.19560E-01	.14610E-02	.74278E+00	.72522E+00	.43807E-02
.45000E+00	-.11712E+01	.85382E+00	.62232E-01	.68586E+00	.17801E-01	.13661E-02	.72756E+00	.71056E+00	.42176E-02
.50000E+00	-.12564E+01	.89459E+00	.66157E-01	.67370E+00	.15835E-01	.12601E-02	.71055E+00	.69418E+00	.40352E-02
.55000E+00	-.13275E+01	.91827E+00	.69137E-01	.66027E+00	.13662E-01	.11430E-02	.69174E+00	.67607E+00	.38336E-02

THETA= .52360E+00

R	U8AR	V8AR	W8AR	SIRR	SIRT	SIRF	SITI	SIFF	SITF
0.	0.	0.	0.	.74853E+00	.35274E-01	.26578E-02	.78926E+00	.78041E+00	.46035E-02
.50000E-01	-.10030E+00	.15851E+00	.11949E-01	.74719E+00	.35134E-01	.26497E-02	.78775E+00	.77891E+00	.45946E-02
.10000E+00	-.19963E+00	.31471E+00	.3760E-01	.74317E+00	.34019E-01	.26252E-02	.78322E+00	.77441E+00	.45681E-02
.15000E+00	-.29703E+00	.46631E+00	.5295E-01	.73648E+00	.33043E-01	.25844E-02	.77568E+00	.76690E+00	.45239E-02
.20000E+00	-.39152E+00	.61101E+00	.64416E-01	.72711E+00	.3043E-01	.25273E-02	.76513E+00	.75639E+00	.44619E-02
.25000E+00	-.48215E+00	.74650E+00	.6985E-01	.71507E+00	.31789E-01	.24539E-02	.75155E+00	.74288E+00	.43823E-02
.30000E+00	-.56793E+00	.87048E+00	.66864E-01	.70035E+00	.30256E-01	.23642E-02	.73496E+00	.72637E+00	.42850E-02
.35000E+00	-.64791E+00	.98065E+00	.75914E-01	.68295E+00	.28443E-01	.22582E-02	.71536E+00	.70685E+00	.41700E-02
.40000E+00	-.72112E+00	.10747E+01	.83998E-01	.66288E+00	.26353E-01	.21358E-02	.69273E+00	.68434E+00	.40373E-02
.45000E+00	-.78658E+00	.11503E+01	.90978E-01	.64013E+00	.23983E-01	.19972E-02	.66710E+00	.65882E+00	.38859E-02
.50000E+00	-.84334E+00	.12053E+01	.96715E-01	.61470E+00	.21355E-01	.18442E-02	.63844E+00	.63029E+00	.37188E-02

55000E+00	-89042E+00	12372E+01	10107E+00	58660E+00	18407E-01	16709E-02	60677E+00	59877E+00	35331E-02
THETA=	.69813E+00								
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000E-01	-40516E-01	18025E+00	15362E-01	76182E+00	40112E-01	34168E-02	77596E+00	73041E+00	40720E-02
10000E+00	-80617E-01	35788E+00	30546E-01	75962E+00	39953E-01	40595E-02	77370E+00	73041E+00	40642E-02
15000E+00	-11989E+00	53027E+00	45375E-01	75304E+00	39478E-01	33749E-02	76693E+00	77127E+00	40407E-02
20000E+00	-15791E+00	69481E+00	59672E-01	72670E+00	38685E-01	33225E-02	75563E+00	75985E+00	40016E-02
25000E+00	-19427E+00	84889E+00	73275E-01	70695E+00	37576E-01	32491E-02	73981E+00	74385E+00	39468E-02
30000E+00	-22856E+00	98987E+00	85958E-01	68280E+00	36149E-01	31547E-02	71947E+00	72329E+00	38764E-02
35000E+00	-26035E+00	11152E+01	97593E-01	65427E+00	34405E-01	30394E-02	69461E+00	69816E+00	37905E-02
40000E+00	-28924E+00	12221E+01	10799E+00	62135E+00	32345E-01	29030E-02	66524E+00	66845E+00	36886E-02
45000E+00	-31480E+00	13081E+01	11696E+00	58403E+00	29967E-01	27458E-02	63134E+00	63418E+00	35712E-02
50000E+00	-33663E+00	13706E+01	12433E+00	54233E+00	27272E-01	25675E-02	59292E+00	59534E+00	34382E-02
55000E+00	-35430E+00	14069E+01	12994E+00	49624E+00	24261E-01	23683E-02	54999E+00	55192E+00	32895E-02
THETA=	.87266E+00								
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000E-01	-23105E-01	18025E+00	13307E-01	77596E+00	40112E-01	40720E-02	76182E+00	78041E+00	34168E-02
10000E+00	-46037E-01	35788E+00	36403E-01	77286E+00	39953E-01	40595E-02	75876E+00	77729E+00	34103E-02
15000E+00	-68625E-01	53027E+00	54076E-01	76354E+00	39478E-01	40220E-02	74958E+00	76794E+00	33906E-02
20000E+00	-90696E-01	69481E+00	71114E-01	74801E+00	38685E-01	39596E-02	73428E+00	75234E+00	33577E-02
25000E+00	-11208E+00	84889E+00	87306E-01	72626E+00	37576E-01	38721E-02	71287E+00	73051E+00	33118E-02
30000E+00	-13260E+00	98987E+00	10244E+00	69830E+00	36149E-01	37596E-02	70244E+00	70244E+00	32527E-02
35000E+00	-15208E+00	11152E+01	11631E+00	66413E+00	34405E-01	36222E-02	65167E+00	66813E+00	31805E-02
40000E+00	-17036E+00	12221E+01	12869E+00	62345E+00	32345E-01	34597E-02	61190E+00	62759E+00	30951E-02
45000E+00	-18726E+00	13081E+01	13939E+00	57115E+00	29967E-01	32723E-02	56600E+00	58080E+00	29966E-02
50000E+00	-20261E+00	13706E+01	14818E+00	52434E+00	27272E-01	30598E-02	51399E+00	52778E+00	28850E-02
55000E+00	-21623E+00	14069E+01	15489E+00	46531E+00	24261E-01	28224E-02	45586E+00	46852E+00	27602E-02
THETA=	.10472E+01								
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000E-01	-82889E-01	15851E+00	20697E-01	78926E+00	35274E-01	46035E-02	74853E+00	78041E+00	26578E-02
10000E+00	-16505E+00	31471E+00	41154E-01	78529E+00	35134E-01	45894E-02	74471E+00	77651E+00	26527E-02
15000E+00	-24577E+00	46631E+00	61133E-01	77340E+00	34716E-01	45470E-02	73328E+00	76480E+00	26374E-02
20000E+00	-32431E+00	61101E+00	80393E-01	75359E+00	34019E-01	44763E-02	71423E+00	74529E+00	26119E-02
25000E+00	-39995E+00	74650E+00	98701E-01	72585E+00	33043E-01	43775E-02	68755E+00	71797E+00	25761E-02
30000E+00	-47197E+00	87048E+00	11581E+00	69018E+00	31789E-01	42503E-02	65325E+00	68285E+00	25301E-02
35000E+00	-53964E+00	98065E+00	13149E+00	64658E+00	30256E-01	40949E-02	61132E+00	63992E+00	24740E-02
40000E+00	-60244E+00	10747E+01	14549E+00	59506E+00	28443E-01	39113E-02	56178E+00	58919E+00	24076E-02
45000E+00	-65904E+00	11503E+01	15758E+00	53561E+00	26353E-01	36994E-02	50461E+00	53065E+00	23309E-02
50000E+00	-70932E+00	12053E+01	16752E+00	46824E+00	23983E-01	34592E-02	43982E+00	46430E+00	22441E-02
55000E+00	-75235E+00	12372E+01	17506E+00	39294E+00	21335E-01	31908E-02	36741E+00	39016E+00	21471E-02
THETA=	.12217E+01								
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000E-01	-13163E+00	11765E+00	22457E-01	80009E+00	26181E-01	49951E-02	73769E+00	78041E+00	18181E-02
10000E+00	-26208E+00	23359E+00	44655E-01	79543E+00	26078E-01	49798E-02	73327E+00	77587E+00	18146E-02
15000E+00	-39018E+00	34611E+00	66334E-01	78145E+00	25767E-01	49338E-02	71999E+00	76225E+00	18041E-02
20000E+00	-51475E+00	45351E+00	87234E-01	75814E+00	25250E-01	48571E-02	69787E+00	73954E+00	17866E-02
25000E+00	-63463E+00	55407E+00	10710E+00	72551E+00	24526E-01	47498E-02	66691E+00	70775E+00	17622E-02
30000E+00	-74863E+00	64609E+00	12566E+00	68355E+00	23595E-01	46111E-02	62709E+00	66688E+00	17307E-02
35000E+00	-85558E+00	72786E+00	14267E+00	63228E+00	22457E-01	44432E-02	57843E+00	61692E+00	16923E-02
40000E+00	-95431E+00	79768E+00	15786E+00	57168E+00	21112E-01	42440E-02	52092E+00	55788E+00	16469E-02
45000E+00	-10436E+01	85382E+00	17098E+00	50176E+00	19560E-01	40140E-02	45456E+00	48976E+00	15945E-02
50000E+00	-11224E+01	89459E+00	18176E+00	42251E+00	17801E-01	37534E-02	37935E+00	41256E+00	15351E-02
55000E+00				33394E+00	15835E-01	34622E-02	29530E+00	32627E+00	14687E-02





FEE= .15708E+01

THETA= 0.

0.	UR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.72816E+00	0.	0.	.81056E+00	.77948E+00	.83014E-15
.50000E-01	-.19189E+00	0.	0.	.72813E+00	0.	0.	.81020E+00	.77918E+00	.82855E-15
.10000E+00	-.38197E+00	0.	0.	.72806E+00	0.	0.	.80913E+00	.77828E+00	.82376E-15
.15000E+00	-.56843E+00	0.	0.	.72793E+00	0.	0.	.80733E+00	.77679E+00	.81579E-15
.20000E+00	-.74944E+00	0.	0.	.72775E+00	0.	0.	.80482E+00	.77470E+00	.80462E-15
.25000E+00	-.92320E+00	0.	0.	.72752E+00	0.	0.	.80160E+00	.77201E+00	.79026E-15
.30000E+00	-.10879E+01	0.	0.	.72723E+00	0.	0.	.79766E+00	.76872E+00	.77271E-15
.35000E+00	-.12417E+01	0.	0.	.72690E+00	0.	0.	.79300E+00	.76484E+00	.75197E-15
.40000E+00	-.13828E+01	0.	0.	.72651E+00	0.	0.	.78762E+00	.76036E+00	.72805E-15
.45000E+00	-.15094E+01	0.	0.	.72608E+00	0.	0.	.78153E+00	.75528E+00	.70093E-15
.50000E+00	-.16197E+01	0.	0.	.72559E+00	0.	0.	.77471E+00	.74960E+00	.67061E-15
.55000E+00	-.17118E+01	0.	0.	.72505E+00	0.	0.	.76719E+00	.74333E+00	.63711E-15

THETA= .17453E+00

0.	UR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.73065E+00	.14091E-01	.14415E-15	.80807E+00	.77948E+00	.81753E-15
.50000E-01	-.18072E+00	.63320E-01	.64809E-15	.73046E+00	.14035E-01	.14371E-15	.80758E+00	.77903E+00	.81596E-15
.10000E+00	-.35973E+00	.12572E+00	.12887E-14	.72991E+00	.13869E-01	.14238E-15	.80609E+00	.77770E+00	.81125E-15
.15000E+00	-.53532E+00	.18629E+00	.19143E-14	.72899E+00	.13591E-01	.14017E-15	.80360E+00	.77548E+00	.80339E-15
.20000E+00	-.70577E+00	.24411E+00	.25175E-14	.72770E+00	.13202E-01	.13708E-15	.80012E+00	.77238E+00	.79240E-15
.25000E+00	-.86938E+00	.29825E+00	.30907E-14	.72604E+00	.12702E-01	.13309E-15	.79565E+00	.76839E+00	.77826E-15
.30000E+00	-.10244E+01	.34781E+00	.36265E-14	.72402E+00	.12091E-01	.12823E-15	.79018E+00	.76351E+00	.76097E-15
.35000E+00	-.11692E+01	.39187E+00	.41174E-14	.72163E+00	.11369E-01	.12248E-15	.78371E+00	.75775E+00	.74055E-15
.40000E+00	-.13020E+01	.42950E+00	.45558E-14	.71887E+00	.10536E-01	.11584E-15	.77626E+00	.75110E+00	.71698E-15
.45000E+00	-.14212E+01	.45979E+00	.49344E-14	.71574E+00	.9520E-02	.10832E-15	.76781E+00	.74356E+00	.69028E-15
.50000E+00	-.15249E+01	.48183E+00	.52455E-14	.71224E+00	.85368E-02	.99915E-16	.75836E+00	.73514E+00	.66043E-15
.55000E+00	-.16115E+01	.49470E+00	.54818E-14	.70838E+00	.73704E-02	.90626E-16	.74792E+00	.72582E+00	.62743E-15

THETA= .34907E+00

0.	UR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.73780E+00	.26482E-01	.28393E-15	.80092E+00	.77948E+00	.78008E-15
.50000E-01	-.14854E+00	.11900E+00	.12765E-14	.73716E+00	.26378E-01	.28305E-15	.80002E+00	.77862E+00	.77858E-15
.10000E+00	-.29567E+00	.23628E+00	.25382E-14	.73524E+00	.26065E-01	.28044E-15	.79733E+00	.77604E+00	.77408E-15
.15000E+00	-.43997E+00	.35011E+00	.37705E-14	.73204E+00	.25543E-01	.27608E-15	.79285E+00	.77174E+00	.76559E-15
.20000E+00	-.58003E+00	.45877E+00	.49585E-14	.72756E+00	.24812E-01	.26999E-15	.78658E+00	.76572E+00	.75610E-15
.25000E+00	-.71443E+00	.56053E+00	.60875E-14	.72180E+00	.23873E-01	.26214E-15	.77851E+00	.75798E+00	.74260E-15
.30000E+00	-.84175E+00	.65367E+00	.71428E-14	.71477E+00	.22724E-01	.25256E-15	.76865E+00	.74852E+00	.72611E-15
.35000E+00	-.96059E+00	.73647E+00	.81096E-14	.70645E+00	.21367E-01	.24123E-15	.75699E+00	.73734E+00	.70663E-15
.40000E+00	-.10695E+01	.80720E+00	.89732E-14	.69685E+00	.19802E-01	.22816E-15	.74354E+00	.72444E+00	.68414E-15
.45000E+00	-.11672E+01	.86413E+00	.97188E-14	.68598E+00	.18027E-01	.21315E-15	.72830E+00	.70982E+00	.65865E-15
.50000E+00	-.12520E+01	.90555E+00	.10332E-13	.67382E+00	.16044E-01	.19679E-15	.71127E+00	.69348E+00	.63017E-15
.55000E+00	-.13228E+01	.92973E+00	.10797E-13	.66038E+00	.13852E-01	.17850E-15	.69244E+00	.67542E+00	.59869E-15

THETA= .52360E+00

0.	UR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.74876E+00	.35680E-01	.41507E-15	.78966E+00	.77948E+00	.71893E-15
.50000E-01	-.99246E-01	.16033E+00	.18661E-14	.74742E+00	.35539E-01	.41380E-15	.78845E+00	.77798E+00	.71754E-15
.10000E+00	-.19753E+00	.31834E+00	.37106E-14	.74341E+00	.35117E-01	.40998E-15	.78393E+00	.77348E+00	.71340E-15
.15000E+00	-.29390E+00	.47170E+00	.55121E-14	.73672E+00	.34414E-01	.40361E-15	.77638E+00	.76599E+00	.70649E-15
.20000E+00	-.38738E+00	.61810E+00	.72488E-14	.72735E+00	.33429E-01	.39469E-15	.76583E+00	.75550E+00	.69682E-15
.25000E+00	-.47702E+00	.75520E+00	.89933E-14	.71531E+00	.32164E-01	.38323E-15	.75225E+00	.74202E+00	.68439E-15
.30000E+00	-.56186E+00	.88069E+00	.10442E-13	.70059E+00	.30617E-01	.36922E-15	.73566E+00	.72554E+00	.66919E-15
.35000E+00	-.64094E+00	.99224E+00	.11855E-13	.68319E+00	.28788E-01	.35266E-15	.71605E+00	.70606E+00	.65123E-15
.40000E+00	-.71329E+00	.10875E+01	.13118E-13	.66312E+00	.26679E-01	.33355E-15	.69342E+00	.68359E+00	.63051E-15
.45000E+00	-.77797E+00	.11642E+01	.14208E-13	.64038E+00	.24288E-01	.31190E-15	.66778E+00	.65812E+00	.60702E-15
.50000E+00	-.83400E+00	.12200E+01	.15104E-13	.61495E+00	.21616E-01	.28770E-15	.63012E+00	.62965E+00	.58077E-15

THETA =	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000E+00	-88042E+00	12526E+01	15784E-13	58685E+00	18662E-01	26095E-15	60744E+00	59818E+00	55176E-15	55176E-15
THETA =	69813E+00									
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000E-01	38774E-01	18232E+00	23990E-14	76221E+00	40573E-01	53361E-15	77651E+00	77948E+00	63593E-15	63593E-15
10000E+00	77144E-01	36200E+00	47703E-14	76001E+00	40413E-01	53197E-15	77426E+00	77719E+00	63471E-15	63471E-15
15000E+00	11471E+00	53640E+00	70862E-14	75343E+00	39934E-01	52706E-15	76748E+00	77035E+00	63104E-15	63104E-15
20000E+00	15106E+00	70287E+00	93189E-14	74245E+00	39134E-01	51887E-15	75618E+00	75894E+00	62493E-15	62493E-15
25000E+00	18580E+00	85878E+00	11441E-13	72709E+00	38014E-01	50741E-15	74037E+00	74298E+00	61637E-15	61637E-15
30000E+00	21852E+00	10015E+01	13424E-13	70734E+00	36575E-01	49267E-15	72004E+00	72244E+00	60538E-15	60538E-15
35000E+00	24883E+00	11283E+01	15241E-13	68320E+00	34816E-01	47466E-15	69519E+00	69735E+00	59193E-15	59193E-15
40000E+00	27631E+00	12367E+01	16864E-13	65467E+00	32737E-01	45331E-15	66583E+00	66769E+00	57605E-15	57605E-15
45000E+00	30056E+00	13239E+01	18265E-13	62175E+00	30338E-01	42880E-15	63194E+00	63348E+00	55771E-15	55771E-15
50000E+00	32118E+00	13874E+01	19417E-13	58444E+00	27619E-01	40097E-15	59354E+00	59470E+00	53694E-15	53694E-15
55000E+00	33777E+00	14244E+01	20292E-13	54274E+00	24581E-01	36985E-15	55062E+00	55135E+00	51372E-15	51372E-15
THETA =	87266E+00									
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000E-01	25580E-01	18232E+00	28590E-14	77651E+00	40573E-01	63593E-15	76221E+00	77948E+00	53361E-15	53361E-15
10000E+00	50970E-01	36200E+00	56850E-14	77341E+00	40413E-01	63398E-15	75915E+00	77636E+00	53258E-15	53258E-15
15000E+00	75981E-01	53640E+00	84450E-14	76409E+00	39934E-01	62812E-15	74997E+00	76702E+00	52950E-15	52950E-15
20000E+00	10042E+00	70287E+00	11106E-13	74856E+00	39134E-01	61836E-15	73469E+00	75145E+00	52438E-15	52438E-15
25000E+00	12411E+00	85878E+00	13635E-13	72682E+00	38014E-01	60470E-15	71328E+00	72964E+00	51720E-15	51720E-15
30000E+00	14685E+00	10015E+01	15998E-13	69886E+00	36575E-01	58714E-15	6857E+00	70161E+00	50797E-15	50797E-15
35000E+00	16845E+00	11283E+01	18164E-13	66469E+00	34816E-01	56567E-15	65213E+00	66736E+00	49669E-15	49669E-15
40000E+00	18872E+00	12367E+01	20098E-13	62431E+00	32737E-01	54030E-15	61238E+00	62687E+00	48336E-15	48336E-15
45000E+00	20748E+00	13239E+01	21768E-13	57772E+00	30338E-01	51103E-15	56651E+00	58015E+00	46798E-15	46798E-15
50000E+00	22454E+00	13874E+01	23141E-13	52491E+00	27619E-01	47785E-15	51453E+00	52721E+00	45055E-15	45055E-15
55000E+00	23970E+00	14244E+01	24183E-13	46590E+00	24581E-01	44077E-15	45644E+00	46803E+00	43106E-15	43106E-15
THETA =	10472E+01									
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000E-01	86052E-01	16033E+00	32322E-14	78996E+00	35680E-01	71893E-15	74876E+00	77948E+00	41507E-15	41507E-15
10000E+00	17136E+00	31834E+00	64270E-14	78600E+00	35539E-01	71672E-15	74495E+00	77558E+00	41427E-15	41427E-15
15000E+00	25517E+00	47170E+00	95472E-14	77411E+00	35117E-01	71010E-15	73353E+00	76389E+00	41188E-15	41188E-15
20000E+00	33674E+00	61810E+00	12555E-13	75429E+00	34414E-01	69907E-15	71449E+00	74440E+00	40789E-15	40789E-15
25000E+00	41533E+00	75520E+00	15414E-13	72656E+00	33429E-01	68363E-15	68783E+00	71712E+00	40231E-15	40231E-15
30000E+00	49018E+00	88069E+00	18086E-13	69089E+00	32164E-01	66377E-15	65355E+00	68204E+00	39513E-15	39513E-15
35000E+00	56056E+00	99224E+00	20534E-13	64730E+00	30617E-01	63950E-15	61166E+00	63917E+00	38636E-15	38636E-15
40000E+00	62571E+00	10875E+01	22721E-13	59578E+00	28788E-01	61082E-15	56215E+00	58850E+00	37599E-15	37599E-15
45000E+00	68489E+00	11642E+01	24609E-13	53634E+00	26679E-01	57773E-15	50503E+00	53004E+00	36402E-15	36402E-15
50000E+00	73735E+00	12200E+01	26161E-13	46898E+00	24288E-01	54022E-15	44029E+00	46379E+00	35046E-15	35046E-15
55000E+00	78235E+00	12526E+01	27339E-13	39368E+00	21616E-01	49830E-15	36793E+00	38974E+00	33531E-15	33531E-15
THETA =	12217E+01									
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000E-01	13535E+00	11900E+00	35071E-14	80092E+00	26482E-01	78008E-15	73780E+00	77948E+00	28093E-15	28093E-15
10000E+00	26950E+00	23628E+00	69737E-14	79626E+00	26378E-01	77769E-15	73338E+00	77494E+00	28338E-15	28338E-15
15000E+00	40125E+00	35011E+00	10359E-13	78228E+00	26065E-01	77050E-15	72012E+00	76133E+00	28174E-15	28174E-15
20000E+00	52939E+00	45877E+00	13623E-13	75897E+00	25543E-01	75854E-15	69802E+00	73865E+00	27902E-15	27902E-15
25000E+00	65273E+00	56053E+00	16725E-13	72634E+00	2412E-01	74178E-15	66708E+00	70690E+00	27520E-15	27520E-15
30000E+00	77008E+00	65367E+00	19625E-13	68439E+00	23873E-01	72023E-15	62730E+00	66608E+00	27029E-15	27029E-15
35000E+00	88021E+00	73647E+00	22281E-13	63312E+00	22724E-01	69390E-15	57867E+00	61619E+00	26428E-15	26428E-15
40000E+00	98195E+00	80720E+00	24654E-13	57253E+00	21367E-01	66278E-15	52121E+00	55723E+00	25719E-15	25719E-15
45000E+00	10741E+01	86413E+00	26702E-13	50261E+00	19802E-01	62687E-15	45491E+00	48919E+00	24901E-15	24901E-15
50000E+00	11554E+01	90555E+00	28386E-13	42338E+00	18027E-01	58617E-15	37977E+00	41209E+00	23973E-15	23973E-15
55000E+00				33482E+00	16044E-01	54069E-15	29578E+00	32591E+00	22936E-15	22936E-15

THETA =	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000E-01	86052E-01	16033E+00	32322E-14	78996E+00	35680E-01	71893E-15	74876E+00	77948E+00	41507E-15	41507E-15
10000E+00	17136E+00	31834E+00	64270E-14	78600E+00	35539E-01	71672E-15	74495E+00	77558E+00	41427E-15	41427E-15
15000E+00	25517E+00	47170E+00	95472E-14	77411E+00	35117E-01	71010E-15	73353E+00	76389E+00	41188E-15	41188E-15
20000E+00	33674E+00	61810E+00	12555E-13	75429E+00	34414E-01	69907E-15	71449E+00	74440E+00	40789E-15	40789E-15
25000E+00	41533E+00	75520E+00	15414E-13	72656E+00	33429E-01	68363E-15	68783E+00	71712E+00	40231E-15	40231E-15
30000E+00	49018E+00	88069E+00	18086E-13	69089E+00	32164E-01	66377E-15	65355E+00	68204E+00	39513E-15	39513E-15
35000E+00	56056E+00	99224E+00	20534E-13	64730E+00	30617E-01	63950E-15	61166E+00	63917E+00	38636E-15	38636E-15
40000E+00	62571E+00	10875E+01	22721E-13	59578E+00	28788E-01	61082E-15	56215E+00	58850E+00	37599E-15	37599E-15
45000E+00	68489E+00	11642E+01	24609E-13	53634E+00	26679E-01	57773E-15	50503E+00	53004E+00	36402E-15	36402E-15
50000E+00	73735E+00	12200E+01	26161E-13	46898E+00	24288E-01	54022E-15	44029E+00	46379E+00	35046E-15	35046E-15
55000E+00	78235E+00	12526E+01	27339E-13	39368E+00	21616E-01	49830E-15	36793E+00	38974E+00	33531E-15	33531E-15
THETA =	12217E+01									
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000E-01	13535E+00	11900E+00	35071E-14	80092E+00	26482E-01	78008E-15	73780E+00	77948E+00	28093E-15	28093E-15
10000E+00	26950E+00	23628E+00	69737E-14	79626E+00	26378E-01	77769E-15	73338E+00	77494E+00	28338E-15	28338E-15
15000E+00	40125E+00	35011E+00	10359E-13	78228E+00	26065E-01	77050E-15	72012E+00	76133E+00	28174E-15	28174E-15
20000E+00	52939E+00	45877E+00	13623E-13	75897E+00	25543E-01	75854E-15	69802E+00	73865E+00	27902E-15	27902E-15
25000E+00	65273E+00	56053E+00	16725E-13	72634E+00	2412E-01	74178E-15	66708E+00	70690E+00	27520E-15	27520E-15
30000E+00	77008E+00	65367E+00	19625E-13	68439E+00	23873E-01	72023E-15	62730E+00	66608E+00	27029E-15	27029E-15
35000E+00	88021E+00	73647E+00	22281E-13	63312E+00	22724E-01	69390E-15	57867E+00	61619E+00	26428E-15	26428E-15
40000E+00	98195E+00	80720E+00	24654E-13	57253E+00	21367E-01	66278E-15	52121E+00	55723E+00	25719E-15	25719E-15
45000E+00	10741E+01	86413E+00	26702E-13	50261E+00	19802E-01	62687E-15	45491E+00	48919E+00	24901E-15	24901E-15
50000E+00	11554E+01	90555E+00	28386E-13	42338E+00	18027E-01	58617E-15	37977E+00	41209E+00	23973E-15	23973E-15
55000E+00				33482E+00	16044E-01	54069E-15	29578E+00	32591E+00	22936E-15	22936E-15

.55000E+00	.12247E+01	.92973E+00	.29665E-13	.23654E+00	.13852E-01	.49042E-15	.20296E+00	.23066E+00	.21791E-15
THETA=	.13963E+01								
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	.16753E+00	.63320E-01	.36755E-14	.80807E+00	.14091E-01	.81753E-15	.73065E+00	.77948E+00	.14415E-15
.10000E+00	.33355E+00	.12572E+00	.73085E-14	.80296E+00	.14035E-01	.81502E-15	.72583E+00	.77452E+00	.14388E-15
.15000E+00	.49659E+00	.18629E+00	.10857E-13	.78761E+00	.13869E-01	.80750E-15	.71137E+00	.75967E+00	.14304E-15
.20000E+00	.65513E+00	.24411E+00	.14277E-13	.76202E+00	.13591E-01	.79495E-15	.68727E+00	.73490E+00	.14166E-15
.25000E+00	.80769E+00	.29825E+00	.17528E-13	.72621E+00	.13202E-01	.77739E-15	.65353E+00	.70024E+00	.13975E-15
.30000E+00	.95276E+00	.34781E+00	.20567E-13	.68015E+00	.12702E-01	.75481E-15	.61016E+00	.65567E+00	.13723E-15
.35000E+00	.10889E+01	.39187E+00	.23351E-13	.62387E+00	.12091E-01	.72721E-15	.55714E+00	.60119E+00	.13418E-15
.40000E+00	.12145E+01	.42950E+00	.25837E-13	.55735E+00	.11369E-01	.69460E-15	.49449E+00	.53681E+00	.13058E-15
.45000E+00	.13281E+01	.45979E+00	.27984E-13	.48060E+00	.10536E-01	.65697E-15	.42220E+00	.46253E+00	.12642E-15
.50000E+00	.14283E+01	.48183E+00	.29749E-13	.39361E+00	.95920E-02	.61432E-15	.34026E+00	.37834E+00	.12171E-15
.55000E+00	.15135E+01	.49470E+00	.31089E-13	.29639E+00	.85368E-02	.56665E-15	.24869E+00	.28425E+00	.11645E-15
THETA=	.15708E+01			.18854E+00	.73704E-02	.51396E-15	.14748E+00	.18025E+00	.11063E-15
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	.17870E+00	.98886E-14	.37322E-14	.81056E+00	.22006E-14	.83014E-15	.72816E+00	.77948E+00	.22170E-28
.10000E+00	.35590E+00	.19634E-13	.74213E-14	.80528E+00	.21919E-14	.82760E-15	.72320E+00	.77438E+00	.22128E-28
.15000E+00	.52970E+00	.29093E-13	.11024E-13	.78946E+00	.21659E-14	.81995E-15	.70833E+00	.75909E+00	.22000E-28
.20000E+00	.69880E+00	.38122E-13	.14498E-13	.76308E+00	.21225E-14	.80722E-15	.68354E+00	.73360E+00	.21787E-28
.25000E+00	.86150E+00	.46578E-13	.17799E-13	.72616E+00	.20618E-14	.78938E-15	.64883E+00	.69792E+00	.21489E-28
.30000E+00	.10162E+01	.54318E-13	.20884E-13	.67868E+00	.19837E-14	.76646E-15	.60421E+00	.65205E+00	.21105E-28
.35000E+00	.11613E+01	.61198E-13	.23711E-13	.62066E+00	.18883E-14	.73843E-15	.54966E+00	.59598E+00	.20637E-28
.40000E+00	.12952E+01	.67075E-13	.26236E-13	.55208E+00	.17756E-14	.70531E-15	.48521E+00	.52972E+00	.20083E-28
.45000E+00	.14163E+01	.71806E-13	.28416E-13	.47295E+00	.16454E-14	.66710E-15	.41083E+00	.45327E+00	.19444E-28
.50000E+00	.15230E+01	.75248E-13	.30208E-13	.38328E+00	.14980E-14	.62379E-15	.32655E+00	.36662E+00	.18719E-28
.55000E+00	.16137E+01	.77257E-13	.31569E-13	.28305E+00	.13332E-14	.57539E-15	.23234E+00	.26978E+00	.17910E-28
THETA=	.17453E+01			.17227E+00	.11510E-14	.52189E-15	.12822E+00	.16274E+00	.17015E-28
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	.16753E+00	.63320E-01	.36755E-14	.80807E+00	.14091E-01	.81753E-15	.73065E+00	.77948E+00	.14415E-15
.10000E+00	.33355E+00	.12572E+00	.73085E-14	.80296E+00	.14035E-01	.81502E-15	.72583E+00	.77452E+00	.14388E-15
.15000E+00	.49659E+00	.18629E+00	.10857E-13	.78761E+00	.13869E-01	.80750E-15	.71137E+00	.75967E+00	.14304E-15
.20000E+00	.65513E+00	.24411E+00	.14277E-13	.76202E+00	.13591E-01	.79495E-15	.68727E+00	.73490E+00	.14166E-15
.25000E+00	.80769E+00	.29825E+00	.17528E-13	.72621E+00	.13202E-01	.77739E-15	.65353E+00	.70024E+00	.13975E-15
.30000E+00	.95276E+00	.34781E+00	.20567E-13	.68015E+00	.12702E-01	.75481E-15	.61016E+00	.65567E+00	.13723E-15
.35000E+00	.10889E+01	.39187E+00	.23351E-13	.62387E+00	.12091E-01	.72721E-15	.55714E+00	.60119E+00	.13418E-15
.40000E+00	.12145E+01	.42950E+00	.25837E-13	.55735E+00	.11369E-01	.69460E-15	.49449E+00	.53681E+00	.13058E-15
.45000E+00	.13281E+01	.45979E+00	.27984E-13	.48060E+00	.10536E-01	.65697E-15	.42220E+00	.46253E+00	.12642E-15
.50000E+00	.14283E+01	.48183E+00	.29749E-13	.39361E+00	.95920E-02	.61432E-15	.34026E+00	.37834E+00	.12171E-15
.55000E+00	.15135E+01	.49470E+00	.31089E-13	.29639E+00	.85368E-02	.56665E-15	.24869E+00	.28425E+00	.11645E-15
THETA=	.19199E+01			.18894E+00	.73704E-02	.51396E-15	.14748E+00	.18025E+00	.11063E-15
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	.13535E+00	.11900E+00	.35071E-14	.80092E+00	.26482E-01	.78008E-15	.73780E+00	.77948E+00	.28393E-15
.10000E+00	.26950E+00	.23628E+00	.69737E-14	.79626E+00	.26378E-01	.77769E-15	.73338E+00	.77494E+00	.28338E-15
.15000E+00	.40125E+00	.35011E+00	.10359E-13	.78228E+00	.26065E-01	.77050E-15	.72012E+00	.76133E+00	.28174E-15
.20000E+00	.52939E+00	.45877E+00	.13623E-13	.75897E+00	.25543E-01	.75854E-15	.69802E+00	.73865E+00	.27902E-15
.25000E+00	.65273E+00	.56053E+00	.16725E-13	.72634E+00	.24812E-01	.74178E-15	.66708E+00	.70690E+00	.27520E-15
.30000E+00	.77008E+00	.65367E+00	.19625E-13	.68439E+00	.23873E-01	.72023E-15	.62730E+00	.66608E+00	.27029E-15
.35000E+00	.88021E+00	.73647E+00	.22728E-13	.63312E+00	.22742E-01	.69390E-15	.57867E+00	.61619E+00	.26428E-15
.40000E+00	.98195E+00	.80720E+00	.24654E-13	.57323E+00	.21367E-01	.66278E-15	.52121E+00	.55723E+00	.25719E-15
.45000E+00	.10741E+01	.86413E+00	.26702E-13	.50261E+00	.19802E-01	.62687E-15	.45491E+00	.48919E+00	.24901E-15
.50000E+00	.11554E+01	.90555E+00	.28386E-13	.42338E+00	.18027E-01	.58617E-15	.37977E+00	.41209E+00	.23973E-15
.55000E+00	.12247E+01	.92973E+00	.29665E-13	.33482E+00	.16044E-01	.54069E-15	.29578E+00	.32591E+00	.22936E-15
THETA=	.19199E+01			.23694E+00	.13852E-01	.49042E-15	.20296E+00	.23066E+00	.21791E-15

FEE= .17453E+01

THETA= 0.

R	URAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.72816E+00	0.	0.	.80962E+00	.78041E+00	-.53157E-02
.50000E-01	-.19185E+00	0.	0.	.72813E+00	0.	0.	.80927E+00	.78011E+00	-.53054E-02
.10000E+00	-.38197E+00	0.	0.	.72806E+00	0.	0.	.80820E+00	.77921E+00	-.52748E-02
.15000E+00	-.56843E+00	0.	0.	.72793E+00	0.	0.	.80641E+00	.77771E+00	-.52237E-02
.20000E+00	-.74944E+00	0.	0.	.72775E+00	0.	0.	.80392E+00	.77560E+00	-.51522E-02
.25000E+00	-.92320E+00	0.	0.	.72752E+00	0.	0.	.80071E+00	.77290E+00	-.50603E-02
.30000E+00	-.10879E+01	0.	0.	.72723E+00	0.	0.	.79678E+00	.76959E+00	-.49479E-02
.35000E+00	-.12417E+01	0.	0.	.72690E+00	0.	0.	.79215E+00	.76569E+00	-.48151E-02
.40000E+00	-.13828E+01	0.	0.	.72651E+00	0.	0.	.78680E+00	.76118E+00	-.46619E-02
.45000E+00	-.15094E+01	0.	0.	.72608E+00	0.	0.	.78073E+00	.75607E+00	-.44882E-02
.50000E+00	-.16197E+01	0.	0.	.72559E+00	0.	0.	.77396E+00	.75036E+00	-.42941E-02
.55000E+00	-.17118E+01	0.	0.	.72505E+00	0.	0.	.76647E+00	.74405E+00	-.40796E-02

THETA= .17453E+00

R	URAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.73062E+00	.13931E-01	-.92305E-03	.80717E+00	.78041E+00	-.52349E-02
.50000E-01	-.18085E+00	.62599E-01	-.41499E-02	.73043E+00	.13876E-01	-.92022E-03	.80667E+00	.77997E+00	-.52248E-02
.10000E+00	-.35998E+00	.12429E+00	-.82519E-02	.72988E+00	.13710E-01	-.91172E-03	.80518E+00	.77863E+00	-.51947E-02
.15000E+00	-.53569E+00	.18416E+00	-.12258E-01	.72896E+00	.13435E-01	-.89756E-03	.80271E+00	.77640E+00	-.51444E-02
.20000E+00	-.70627E+00	.24131E+00	-.16120E-01	.72767E+00	.13050E-01	-.87773E-03	.79924E+00	.77329E+00	-.50739E-02
.25000E+00	-.87000E+00	.29482E+00	-.19791E-01	.72602E+00	.12554E-01	-.85224E-03	.79478E+00	.76928E+00	-.49834E-02
.30000E+00	-.10252E+01	.34378E+00	-.23222E-01	.72399E+00	.11949E-01	-.82108E-03	.78933E+00	.76438E+00	-.48727E-02
.35000E+00	-.11701E+01	.38729E+00	-.26365E-01	.72160E+00	.11233E-01	-.78425E-03	.78288E+00	.75859E+00	-.47420E-02
.40000E+00	-.13030E+01	.42443E+00	-.29172E-01	.71884E+00	.10407E-01	-.74176E-03	.77545E+00	.75191E+00	-.45911E-02
.45000E+00	-.14222E+01	.45431E+00	-.31596E-01	.71571E+00	.94716E-02	-.69379E-03	.76703E+00	.74434E+00	-.44200E-02
.50000E+00	-.15260E+01	.47600E+00	-.33589E-01	.71221E+00	.84257E-02	-.63979E-03	.75761E+00	.73588E+00	-.42289E-02
.55000E+00	-.16127E+01	.48860E+00	-.35102E-01	.70835E+00	.72696E-02	-.58030E-03	.74721E+00	.72653E+00	-.40176E-02

THETA= .34907E+00

R	URAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.73769E+00	.26181E-01	-.18181E-02	.80009E+00	.78041E+00	-.49951E-02
.50000E-01	-.14904E+00	.11765E+00	-.81737E-02	.73705E+00	.26078E-01	-.18125E-02	.79920E+00	.77955E+00	-.49855E-02
.10000E+00	-.29665E+00	.23359E+00	-.16253E-01	.73513E+00	.25767E-01	-.1757E-02	.79205E+00	.77696E+00	-.49567E-02
.15000E+00	-.44144E+00	.34611E+00	-.24143E-01	.73193E+00	.25250E-01	-.17678E-02	.79203E+00	.77265E+00	-.49087E-02
.20000E+00	-.58197E+00	.45351E+00	-.31751E-01	.72745E+00	.24526E-01	-.17288E-02	.78577E+00	.76662E+00	-.48415E-02
.25000E+00	-.71682E+00	.55407E+00	-.38980E-01	.72169E+00	.23595E-01	-.16786E-02	.77771E+00	.75885E+00	-.47551E-02
.30000E+00	-.84459E+00	.64609E+00	-.45737E-01	.71465E+00	.22457E-01	-.16172E-02	.76786E+00	.74937E+00	-.46495E-02
.35000E+00	-.96385E+00	.72786E+00	-.51928E-01	.70634E+00	.21112E-01	-.15447E-02	.75622E+00	.73816E+00	-.45247E-02
.40000E+00	-.10732E+01	.79768E+00	-.57458E-01	.69674E+00	.19560E-01	-.14610E-02	.74278E+00	.72522E+00	-.43807E-02
.45000E+00	-.11712E+01	.85382E+00	-.62232E-01	.68586E+00	.17801E-01	-.13661E-02	.72756E+00	.71056E+00	-.42176E-02
.50000E+00	-.12564E+01	.89459E+00	-.66157E-01	.67370E+00	.15835E-01	-.12601E-02	.71055E+00	.69418E+00	-.40352E-02
.55000E+00	-.13275E+01	.91827E+00	-.69137E-01	.66027E+00	.13662E-01	-.11430E-02	.69174E+00	.67607E+00	-.38336E-02

THETA= .52360E+00

R	URAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
0.	0.	0.	0.	.74853E+00	.35274E-01	-.26578E-02	.78926E+00	.78041E+00	-.46035E-02
.50000E-01	-.10030E+00	.15851E+00	-.11949E-01	.74719E+00	.35134E-01	-.26497E-02	.78775E+00	.77891E+00	-.45946E-02
.10000E+00	-.19963E+00	.31471E+00	-.23760E-01	.74317E+00	.34716E-01	-.26252E-02	.78322E+00	.77441E+00	-.45681E-02
.15000E+00	-.29703E+00	.46631E+00	-.35295E-01	.73648E+00	.34019E-01	-.25844E-02	.77568E+00	.76690E+00	-.45239E-02
.20000E+00	-.39152E+00	.61101E+00	-.46416E-01	.72711E+00	.33043E-01	-.25273E-02	.76513E+00	.75639E+00	-.44619E-02
.25000E+00	-.48215E+00	.74650E+00	-.56985E-01	.71507E+00	.31789E-01	-.24539E-02	.75155E+00	.74288E+00	-.43823E-02
.30000E+00	-.56793E+00	.87048E+00	-.66864E-01	.70035E+00	.30256E-01	-.23642E-02	.73496E+00	.72637E+00	-.42850E-02
.35000E+00	-.64791E+00	.98065E+00	-.75914E-01	.68295E+00	.28443E-01	-.22582E-02	.71536E+00	.70685E+00	-.41700E-02
.40000E+00	-.72112E+00	.10747E+01	-.83998E-01	.66288E+00	.26353E-01	-.21358E-02	.69273E+00	.68434E+00	-.40373E-02
.45000E+00	-.78658E+00	.11503E+01	-.90978E-01	.64013E+00	.23983E-01	-.19972E-02	.66710E+00	.65882E+00	-.38869E-02
.50000E+00	-.84333E+00	.12053E+01	-.96715E-01	.61470E+00	.21335E-01	-.18422E-02	.63844E+00	.63029E+00	-.37188E-02



.55000E+00 -.89042E+00 .12372E+01 -.10107E+00 .58660E+00 .18407E-01 -.16709E-02 .60677E+00 .59877E+00 -.35331E-02									
THETA= .69813F+00									
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	-.40516E-01	.18025F+00	-.15362E-01	.76182E+00	.40112E-01	-.34168E-02	.77596E+00	.78041E+00	-.40720E-02
.10000E+00	-.80617E-01	.35788E+00	-.30546E-01	.75962F+00	.30953E-01	-.34064E-02	.77370E+00	.77813E+00	-.40642E-02
.15000E+00	-.11989E+00	.53027E+00	-.45375E-01	.75304E+00	.39478E-01	-.33749E-02	.76693E+00	.77127E+00	-.40407E-02
.20000E+00	-.15791E+00	.69481E+00	-.59672E-01	.72670E+00	.38685E-01	-.33225E-02	.75563E+00	.75985E+00	-.40016E-02
.25000E+00	-.19427E+00	.84889E+00	-.73259E-01	.70695E+00	.37576E-01	-.32491E-02	.73981E+00	.74385E+00	-.39468E-02
.30000E+00	-.22856E+00	.98987E+00	-.85958E-01	.68280E+00	.36149E-01	-.31547E-02	.71947E+00	.72329E+00	-.38764E-02
.35000E+00	-.26035E+00	.11152E+01	-.97593E-01	.65427E+00	.34405E-01	-.30394E-02	.69461E+00	.69816E+00	-.37903E-02
.40000E+00	-.28924E+00	.12221E+01	-.10799E+00	.62135E+00	.32345E-01	-.29030E-02	.66524E+00	.66845E+00	-.36886E-02
.45000E+00	-.31480E+00	.13081E+01	-.11696E+00	.58403E+00	.29967E-01	-.27458E-02	.63134E+00	.63418E+00	-.35712E-02
.50000E+00	-.33663E+00	.13706E+01	-.12433E+00	.54233E+00	.27272E-01	-.25675E-02	.59292E+00	.59534E+00	-.34382E-02
.55000E+00	-.35430E+00	.14069F+01	-.12994E+00	.49624E+00	.24261E-01	-.23683E-02	.54999E+00	.55192E+00	-.32895E-02
THETA= .87266E+00									
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	.23105E-01	.18025E+00	-.18307E-01	.77596E+00	.40112E-01	-.40720E-02	.76182E+00	.78041E+00	-.34168E-02
.10000E+00	.46037E-01	.35788E+00	-.36403E-01	.77286E+00	.39953E-01	-.40595E-02	.75876E+00	.77729E+00	-.34103E-02
.15000E+00	.68625E-01	.53027E+00	-.56076E-01	.76354E+00	.39478E-01	-.40220E-02	.74958E+00	.76794E+00	-.33906E-02
.20000E+00	.90648E-01	.69481E+00	-.71114E-01	.74801E+00	.38685E-01	-.39596E-02	.73248E+00	.75234E+00	-.33577E-02
.25000E+00	.11208E+00	.84889E+00	-.87306E-01	.72626E+00	.37576E-01	-.38721E-02	.71287E+00	.73051E+00	-.33118E-02
.30000E+00	.13260E+00	.98987E+00	-.10244E+00	.69830E+00	.36149E-01	-.37596E-02	.68533E+00	.70244E+00	-.32527E-02
.35000E+00	.15208E+00	.11152E+01	-.11631E+00	.66413E+00	.34405E-01	-.36222E-02	.65167E+00	.66813E+00	-.31805E-02
.40000E+00	.17036E+00	.12221E+01	-.12869E+00	.62375E+00	.32345E-01	-.34597E-02	.61190E+00	.62759E+00	-.30951E-02
.45000E+00	.18726F+00	.13081E+01	-.13939F+00	.57715F+00	.29967E-01	-.32723E-02	.56600E+00	.58080E+00	-.29966E-02
.50000E+00	.20261E+00	.13706E+01	-.14818E+00	.52434E+00	.27272F-01	-.30598E-02	.51399E+00	.52778E+00	-.28850E-02
.55000E+00	.21623E+00	.14069E+01	-.15485E+00	.46531E+00	.24261E-01	-.28224E-02	.45586E+00	.46852E+00	-.27602E-02
THETA= .10472E+01									
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	.82889E-01	.15851E+00	-.20697E-01	.78926E+00	.35274E-01	-.46035E-02	.74853E+00	.78041E+00	-.26578E-02
.10000E+00	.16505E+00	.31471E+00	-.41154E-01	.78529E+00	.35134E-01	-.45894F-02	.76471E+00	.77651E+00	-.26527E-02
.15000E+00	.24577E+00	.46631E+00	-.61133E-01	.77340E+00	.34716E-01	-.45470E-02	.73328E+00	.76480E+00	-.26374E-02
.20000E+00	.32431E+00	.61101E+00	-.80395E-01	.75359E+00	.34019E-01	-.44763E-02	.71423E+00	.74529E+00	-.26119E-02
.25000E+00	.39995E+00	.61101E+00	-.80395E-01	.72585E+00	.33043E-01	-.43735E-02	.68755E+00	.71197E+00	-.25761E-02
.30000E+00	.47197E+00	.74650E+00	-.98701E-01	.69018E+00	.31789E-01	-.42503E-02	.65325E+00	.68285E+00	-.25301E-02
.35000E+00	.53964E+00	.87048E+00	-.11581E+00	.64658E+00	.30256E-01	-.40949E-02	.61132E+00	.63992E+00	-.24740E-02
.40000E+00	.60224E+00	.98065F+00	-.13149E+00	.59506E+00	.28443E-01	-.39113E-02	.56178E+00	.58919E+00	-.24076E-02
.45000E+00	.65904E+00	.10747E+01	-.14549E+00	.5361E+00	.26353E-01	-.36994E-02	.50461E+00	.53065E+00	-.23309E-02
.50000E+00	.70932E+00	.11503E+01	-.15759E+00	.46824F+00	.23983E-01	-.34592E-02	.43982E+00	.46430E+00	-.22441E-02
.55000E+00	.75235E+00	.12053E+01	-.16752E+00	.39294F+00	.21335E-01	-.31908E-02	.36741E+00	.39016E+00	-.21471E-02
THETA= .12217E+01									
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	.13163E+00	.11765E+00	-.22457E-01	.80009E+00	.26181E-01	-.49951E-02	.73769E+00	.78041E+00	-.18181E-02
.10000E+00	.26208E+00	.23359E+00	-.44655E-01	.79543E+00	.26078E-01	-.49798E-02	.73327E+00	.77587E+00	-.18146E-02
.15000E+00	.39018E+00	.34611E+00	-.66334E-01	.75814E+00	.25767E-01	-.49338E-02	.71999E+00	.76225F+00	-.18041E-02
.20000E+00	.51475E+00	.45351E+00	-.87234E-01	.72551E+00	.25250E-01	-.48571F-02	.69787E+00	.73954E+00	-.17866E-02
.25000E+00	.63463E+00	.55407E+00	-.10712E+00	.68355F+00	.24526E-01	-.47419E-02	.66691E+00	.70775E+00	-.17622E-02
.30000E+00	.74863E+00	.64609E+00	-.12566E+00	.63228E+00	.23595E-01	-.46118E-02	.624709E+00	.66688E+00	-.17307E-02
.35000E+00	.85558E+00	.72786F+00	-.14267E+00	.57168E+00	.22457E-01	-.44432E-02	.57843E+00	.61692E+00	-.16923E-02
.40000E+00	.95431E+00	.79768F+00	-.15786E+00	.502176E+00	.21112E-01	-.42440E-02	.52092E+00	.55788E+00	-.16469E-02
.45000E+00	.10236E+01	.85382E+00	-.17098E+00	.42251E+00	.19560E-01	-.40140E-02	.45450E+00	.48746E+00	-.15945E-02
.50000E+00	.11224E+01	.89459F+00	-.18174E+00	.33394F+00	.17801E-01	-.37534E-02	.37935E+00	.41256E+00	-.15351E-02
.55000E+00	.1224E+01	.89459F+00	-.18174E+00	.33394F+00	.15835E-01	-.34622E-02	.29530E+00	.32627E+00	-.14687E-02

.55000E+00	.11894E+01	.91827E+00	.19995E+00	.23605E+00	.13662E-01	.31403E-02	.20240E+00	.23090E+00	.13953E-02
THETA=	.13963E+01								
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	.16344E+00	.62599E-01	.23535E-01	.80205E+00	.13931E-01	.52349E-02	.73062E+00	.78041E+00	.92305E-03
.10000E+00	.32540E+00	.12429E+00	.46799E-01	.80205E+00	.13876E-01	.52188E-02	.72579E+00	.77545E+00	.92128E-03
.15000E+00	.48443E+00	.18416E+00	.69518E-01	.78670E+00	.13710E-01	.51706E-02	.71132E+00	.76058E+00	.91596E-03
.20000E+00	.63905E+00	.24131E+00	.91422E-01	.76111E+00	.13435E-01	.50903E-02	.68720E+00	.73579E+00	.90709E-03
.25000E+00	.78780E+00	.29482E+00	.11224E+00	.72529E+00	.12550E-01	.49779E-02	.65344E+00	.70108E+00	.89467E-03
.30000E+00	.92921E+00	.34378E+00	.13170E+00	.62294E+00	.12554E-01	.48333E-02	.61002E+00	.65645E+00	.88711E-03
.35000E+00	.10618E+01	.38729E+00	.14952E+00	.55642E+00	.11949E-01	.46566E-02	.55696E+00	.60191E+00	.85920E-03
.40000E+00	.11841E+01	.42443E+00	.16544E+00	.47966E+00	.10407E-01	.44206E-02	.42189E+00	.53745E+00	.83614E-03
.45000E+00	.12947E+01	.45431E+00	.17919E+00	.39266E+00	.94716E-02	.39336E-02	.33989E+00	.46307E+00	.80953E-03
.50000E+00	.13920E+01	.47600E+00	.19049E+00	.29543E+00	.84257E-02	.36284E-02	.24824E+00	.37878E+00	.77937E-03
.55000E+00	.14747E+01	.48860E+00	.19907E+00	.18797E+00	.72696E-02	.32911E-02	.14694E+00	.28457E+00	.74567E-03
THETA=	.15708E+01								
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	.17448E+00	.97761E-14	.23898E-01	.80962E+00	.21755E-14	.53157E-02	.72816E+00	.78041E+00	.91496E-15
.10000E+00	.34740E+00	.19410E-13	.47521E-01	.80435E+00	.21669E-14	.52993E-02	.72320E+00	.77531E+00	.91416E-15
.15000E+00	.51717E+00	.28760E-13	.70591E-01	.78852E+00	.21412E-14	.52504E-02	.70831E+00	.76000E+00	.91408E-15
.20000E+00	.68222E+00	.37685E-13	.92833E-01	.76214E+00	.20982E-14	.51688E-02	.68350E+00	.73448E+00	.91395E-15
.25000E+00	.84100E+00	.46041E-13	.11397E+00	.72521E+00	.20380E-14	.50547E-02	.64876E+00	.69876E+00	.91376E-15
.30000E+00	.99192E+00	.53688E-13	.13373E+00	.67773E+00	.19606E-14	.49078E-02	.60409E+00	.65283E+00	.91351E-15
.35000E+00	.11334E+01	.60483E-13	.15183E+00	.61970E+00	.18660E-14	.47284E-02	.54950E+00	.59670E+00	.91321E-15
.40000E+00	.12639E+01	.66284E-13	.16800E+00	.55112E+00	.17543E-14	.45163E-02	.48499E+00	.53035E+00	.91286E-15
.45000E+00	.13819E+01	.70949E-13	.18196E+00	.47198E+00	.16253E-14	.42716E-02	.41055E+00	.45380E+00	.91245E-15
.50000E+00	.14856E+01	.74337E-13	.19343E+00	.38230E+00	.14792E-14	.39943E-02	.32618E+00	.36705E+00	.91198E-15
.55000E+00	.15737E+01	.76305E-13	.20214E+00	.28206E+00	.13158E-14	.36844E-02	.23189E+00	.27009E+00	.91146E-15
THETA=	.17453E+01								
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	.16344E+00	.62599E-01	.23535E-01	.80717E+00	.13931E-01	.52349E-02	.73062E+00	.78041E+00	.92305E-03
.10000E+00	.32540E+00	.12429E+00	.46799E-01	.80205E+00	.13876E-01	.52188E-02	.72579E+00	.77545E+00	.92128E-03
.15000E+00	.48443E+00	.18416E+00	.69518E-01	.78670E+00	.13710E-01	.51706E-02	.71132E+00	.76058E+00	.91596E-03
.20000E+00	.63905E+00	.24131E+00	.91422E-01	.76111E+00	.13435E-01	.50903E-02	.68720E+00	.73579E+00	.90709E-03
.25000E+00	.78780E+00	.29482E+00	.11224E+00	.72529E+00	.13050E-01	.49779E-02	.65344E+00	.70108E+00	.89467E-03
.30000E+00	.92921E+00	.34378E+00	.13170E+00	.62294E+00	.12554E-01	.48333E-02	.61002E+00	.65645E+00	.88711E-03
.35000E+00	.10618E+01	.38729E+00	.14952E+00	.55642E+00	.11949E-01	.46566E-02	.55696E+00	.60191E+00	.85920E-03
.40000E+00	.11841E+01	.42443E+00	.16544E+00	.47966E+00	.11233E-01	.44477E-02	.49425E+00	.53745E+00	.83614E-03
.45000E+00	.12947E+01	.45431E+00	.17919E+00	.39266E+00	.10407E-01	.42068E-02	.42189E+00	.46307E+00	.80953E-03
.50000E+00	.13920E+01	.47600E+00	.19049E+00	.29543E+00	.94716E-02	.39336E-02	.33989E+00	.37878E+00	.77937E-03
.55000E+00	.14747E+01	.48860E+00	.19907E+00	.18797E+00	.84257E-02	.36284E-02	.24824E+00	.28457E+00	.74567E-03
THETA=	.19199E+01								
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	.13163E+00	.11765E+00	.22457E-01	.80009E+00	.26181E-01	.49951E-02	.73769E+00	.78041E+00	.18181E-02
.10000E+00	.26208E+00	.23359E+00	.46555E-01	.79543E+00	.26078E-01	.49798E-02	.73327E+00	.77545E+00	.18146E-02
.15000E+00	.39018E+00	.34611E+00	.66334E-01	.78145E+00	.25767E-01	.49338E-02	.71999E+00	.76225E+00	.18041E-02
.20000E+00	.51475E+00	.45351E+00	.87234E-01	.75814E+00	.25250E-01	.48571E-02	.69787E+00	.73954E+00	.17866E-02
.25000E+00	.63463E+00	.55407E+00	.10710E+00	.72551E+00	.24526E-01	.47498E-02	.66691E+00	.70175E+00	.17622E-02
.30000E+00	.74863E+00	.64609E+00	.12566E+00	.68355E+00	.23595E-01	.46119E-02	.62709E+00	.66688E+00	.17307E-02
.35000E+00	.85558E+00	.72786E+00	.14267E+00	.63228E+00	.22457E-01	.44432E-02	.57843E+00	.61692E+00	.16923E-02
.40000E+00	.95431E+00	.79768E+00	.15786E+00	.57168E+00	.21112E-01	.42440E-02	.52092E+00	.55788E+00	.16469E-02
.45000E+00	.10436E+01	.85382E+00	.17098E+00	.50176E+00	.19560E-01	.40140E-02	.45456E+00	.48976E+00	.15945E-02
.50000E+00	.11224E+01	.89459E+00	.18176E+00	.42251E+00	.17801E-01	.37534E-02	.37935E+00	.41256E+00	.15351E-02
.55000E+00	.11894E+01	.91827E+00	.19995E+00	.33394E+00	.15835E-01	.34622E-02	.29530E+00	.32627E+00	.14687E-02
THETA=	.19995E+00								
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.50000E-01	.16344E+00	.62599E-01	.23535E-01	.23605E+00	.13662E-01	.31403E-02	.20240E+00	.23090E+00	.13953E-02
.10000E+00	.32540E+00	.12429E+00	.46799E-01	.80205E+00	.13876E-01	.52188E-02	.72579E+00	.77545E+00	.92128E-03
.15000E+00	.48443E+00	.18416E+00	.69518E-01	.78670E+00	.13710E-01	.51706E-02	.71132E+00	.76058E+00	.91596E-03
.20000E+00	.63905E+00	.24131E+00	.91422E-01	.76111E+00	.13435E-01	.50903E-02	.68720E+00	.73579E+00	.90709E-03
.25000E+00	.78780E+00	.29482E+00	.11224E+00	.72529E+00	.13050E-01	.49779E-02	.65344E+00	.70108E+00	.89467E-03
.30000E+00	.92921E+00	.34378E+00	.13170E+00	.62294E+00	.12554E-01	.48333E-02	.61002E+00	.65645E+00	.88711E-03
.35000E+00	.10618E+01	.38729E+00	.14952E+00	.55642E+00	.11949E-01	.46566E-02	.55696E+00	.60191E+00	.85920E-03
.40000E+00	.11841E+01	.42443E+00	.16544E+00	.47966E+00	.11233E-01	.44477E-02	.49425E+00	.53745E+00	.83614E-03
.45000E+00	.12947E+01	.45431E+00	.17919E+00	.39266E+00	.10407E-01	.42068E-02	.42189E+00	.46307E+00	.80953E-03
.50000E+00	.13920E+01	.47600E+00	.19049E+00	.29543E+00	.94716E-02	.39336E-02	.33989E+00	.37878E+00	.77937E-03
.55000E+00	.14747E+01	.48860E+00	.19907E+00	.18797E+00	.84257E-02	.36284E-02	.24824E+00	.28457E+00	.74567E-03
THETA=	.19199E+01								

# Set II, Model III — Lower Mantle

C34

FEE= 0. (q=0)  
THETA= 0. (p=0)

R	URAP (U)	VBAR (V)	WBAR (W)	SIRR (S)	SIRT (T)	SIRF (F)	SITT (G)	SIFF (G)	SITF (F)
.55000E+00	-.19144E+01	0.	0.	.73100E+00	0.	0.	.79839E+00	.10371E+01	0.
.60000E+00	-.19335E+01	0.	0.	.73061E+00	0.	0.	.66100E+00	.86275E+00	0.
.65000E+00	-.19249E+01	0.	0.	.69955E+00	0.	0.	.56988E+00	.74582E+00	0.
.70000E+00	-.18996E+01	0.	0.	.65879E+00	0.	0.	.50435E+00	.66060E+00	0.
.75000E+00	-.18675E+01	0.	0.	.61720E+00	0.	0.	.45336E+00	.59330E+00	0.
.80000E+00	-.18318E+01	0.	0.	.57835E+00	0.	0.	.41070E+00	.53623E+00	0.
.85000E+00	-.17935E+01	0.	0.	.54343E+00	0.	0.	.37278E+00	.48487E+00	0.
.90000E+00	-.17527E+01	0.	0.	.51258E+00	0.	0.	.33742E+00	.43651E+00	0.
THETA=	-.17453E+00								

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.18449E+01	.29646E+00	0.	.71315E+00	.43235E-02	0.	.77132E+00	.10206E+01	0.
.60000E+00	-.18659E+01	.26411E+00	0.	.71154E+00	.20328E-01	0.	.63877E+00	.84914E+00	0.
.65000E+00	-.18562E+01	.24336E+00	0.	.68010E+00	.26902E-01	0.	.55018E+00	.73345E+00	0.
.70000E+00	-.18323E+01	.22896E+00	0.	.63909E+00	.28575E-01	0.	.48584E+00	.64849E+00	0.
.75000E+00	-.18018E+01	.21779E+00	0.	.59709E+00	.27609E-01	0.	.43521E+00	.58084E+00	0.
.80000E+00	-.17678E+01	.20790E+00	0.	.55756E+00	.25175E-01	0.	.39238E+00	.52300E+00	0.
.85000E+00	-.17312E+01	.19803E+00	0.	.52165E+00	.21846E-01	0.	.35393E+00	.47057E+00	0.
.90000E+00	-.16922E+01	.18729E+00	0.	.48951E+00	.18107E-01	0.	.31777E+00	.42093E+00	0.
THETA=	-.34907E+00								

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.16450E+01	.55716E+00	0.	.66175E+00	.81255E-02	0.	.69337E+00	.97300E+00	0.
.60000E+00	-.16657E+01	.49637E+00	0.	.62661E+00	.38203E-01	0.	.57477E+00	.80995E+00	0.
.65000E+00	-.16586E+01	.45737E+00	0.	.62408E+00	.50500E-01	0.	.49374E+00	.69784E+00	0.
.70000E+00	-.16387E+01	.43030E+00	0.	.58236E+00	.53703E-01	0.	.43256E+00	.61363E+00	0.
.75000E+00	-.16127E+01	.40931E+00	0.	.54971E+00	.51887E-01	0.	.38297E+00	.54496E+00	0.
.80000E+00	-.15814E+01	.39073E+00	0.	.51970E+00	.47313E-01	0.	.33965E+00	.48491E+00	0.
.85000E+00	-.15514E+01	.37218E+00	0.	.45895E+00	.41150E-01	0.	.29965E+00	.42942E+00	0.
.90000E+00	-.15180E+01	.35200E+00	0.	.42309E+00	.34031E-01	0.	.26119E+00	.37608E+00	0.
THETA=	-.52360E+00								

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.13386E+01	.75066E+00	0.	.58301E+00	.10947E-01	0.	.57395E+00	.90012E+00	0.
.60000E+00	-.13588E+01	.66876E+00	0.	.57246E+00	.51471E-01	0.	.47672E+00	.74990E+00	0.
.65000E+00	-.13559E+01	.61622E+00	0.	.53825E+00	.68119E-01	0.	.40659E+00	.64329E+00	0.
.70000E+00	-.13420E+01	.57975E+00	0.	.49544E+00	.72355E-01	0.	.35091E+00	.56023E+00	0.
.75000E+00	-.13229E+01	.55146E+00	0.	.45048E+00	.69008E-01	0.	.30293E+00	.49000E+00	0.
.80000E+00	-.13010E+01	.52643E+00	0.	.40599E+00	.63745E-01	0.	.25885E+00	.42655E+00	0.
.85000E+00	-.12771E+01	.50143E+00	0.	.36288E+00	.55442E-01	0.	.21649E+00	.36638E+00	0.
.90000E+00	-.12512E+01	.47424E+00	0.	.32132E+00	.45845E-01	0.	.17450E+00	.30736E+00	0.
THETA=	-.69813E+00								

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.96279E+00	.85362E+00	0.	.48641E+00	.12449E-01	0.	.42745E+00	.81072E+00	0.
.60000E+00	-.98242E+00	.76048E+00	0.	.46923E+00	.58531E-01	0.	.35644E+00	.67624E+00	0.
.65000E+00	-.98447E+00	.70074E+00	0.	.43296E+00	.77463E-01	0.	.30001E+00	.57636E+00	0.
.70000E+00	-.97809E+00	.65926E+00	0.	.38892E+00	.82279E-01	0.	.25076E+00	.49473E+00	0.
.75000E+00	-.96752E+00	.62710E+00	0.	.34166E+00	.79496E-01	0.	.20474E+00	.42257E+00	0.
.80000E+00	-.95462E+00	.59863E+00	0.	.29348E+00	.72488E-01	0.	.15974E+00	.35496E+00	0.
.85000E+00	-.94006E+00	.57021E+00	0.	.24504E+00	.63046E-01	0.	.11447E+00	.28904E+00	0.
.90000E+00	-.92389E+00	.53929E+00	0.	.19649E+00	.52138E-01	0.	.68164E-01	.22306E+00	0.
THETA=	-.87266E+00								

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.56286E+00	.85362E+00	0.	.38362E+00	.12449E-01	0.	.2156E+00	.71557E+00	0.
.60000E+00	-.58187E+00	.76048E+00	0.	.35937E+00	.58531E-01	0.	.22844E+00	.59786E+00	0.
.65000E+00	-.58925E+00	.70074E+00	0.	.32092E+00	.77463E-01	0.	.18659E+00	.50514E+00	0.



70000E+00	-59081E+00	65926E+00	-8279E-01	0.	14419E+00	42502E+00	0.
75000E+00	-58930E+00	62710E+00	7949E-01	0.	10026E+00	35081E+00	0.
80000E+00	-58598E+00	59863E+00	7248E-01	0.	54269E-01	27878E+00	0.
85000E+00	-58137E+00	57021E+00	6304E-01	0.	59111E-02	20674E+00	0.
90000E+00	-57558E+00	53929E+00	52138E-01	0.	-44998E-01	13336E+00	0.
THETA=	.10472E+01						
55000E+00	-18705E+00	75066E+00	10947E-01	0.	12506E+00	62617E+00	0.
60000E+00	-20547E+00	66876E+00	51471E-01	0.	10816E+00	52420E+00	0.
65000E+00	-21787E+00	61622E+00	68119E-01	0.	80012E-01	43822E+00	0.
70000E+00	-22689E+00	57975E+00	16875E-01	0.	44038E-01	35951E+00	0.
75000E+00	-23388E+00	55146E+00	69908E-01	0.	20746E-02	28338E+00	0.
80000E+00	-23957E+00	52643E+00	63745E-01	0.	-44842E-01	20720E+00	0.
85000E+00	-24431E+00	50143E+00	55442E-01	0.	96102E-01	12940E+00	0.
90000E+00	-24828E+00	47424E+00	45849E-01	0.	15134E+00	49060E-01	0.
THETA=	.12217E+01						
55000E+00	-11931E+00	55716E+00	81255E-02	0.	56394E-02	55329E+00	0.
60000E+00	-10137E+00	49637E+00	38203E-01	0.	10104E-01	46415E+00	0.
65000E+00	-84887E-01	45737E+00	50560E-01	0.	-68722E-02	38366E+00	0.
70000E+00	-69788E-01	43930E+00	53703E-01	0.	-37604E-01	30611E+00	0.
75000E+00	-55853E-01	40931E+00	51887E-01	0.	-77966E-01	22842E+00	0.
80000E+00	-42827E-01	39073E+00	47313E-01	0.	-12564E+00	14884E+00	0.
85000E+00	-30462E-01	37218E+00	41150E-01	0.	-17526E+00	66355E-01	0.
90000E+00	-18540E-01	35200E+00	34031E-01	0.	-23802E+00	-19659E-01	0.
THETA=	.13963E+01						
55000E+00	-31927E+00	29646E+00	43235E-02	0.	72309E-01	50571E+00	0.
60000E+00	-30165E+00	26411E+00	20328E-01	0.	-53896E-01	42496E+00	0.
65000E+00	-28250E+00	24336E+00	26902E-01	0.	-63582E-01	34805E+00	0.
70000E+00	-26342E+00	22896E+00	28575E-01	0.	-90892E-01	27126E+00	0.
75000E+00	-24497E+00	21779E+00	27609E-01	0.	-13021E+00	19254E+00	0.
80000E+00	-22715E+00	20790E+00	25175E-01	0.	-17837E+00	11075E+00	0.
85000E+00	-20981E+00	19803E+00	21896E-01	0.	-23354E+00	25204E-01	0.
90000E+00	-19269E+00	18729E+00	18107E-01	0.	-29460E+00	-64512E-01	0.
THETA=	.15708E+01						
55000E+00	-38872E+00	46298E-13	67320E-15	0.	99380E-01	48919E+00	0.
60000E+00	-37120E+00	41246E-13	31746E-14	0.	76123E-01	41135E+00	0.
65000E+00	-35113E+00	38006E-13	42013E-14	0.	83277E-01	33569E+00	0.
70000E+00	-33068E+00	35757E-13	44626E-14	0.	-10940E+00	75915E+00	0.
75000E+00	-31064E+00	34012E-13	43116E-14	0.	-14835E+00	18008E+00	0.
80000E+00	-29116E+00	32468E-13	39316E-14	0.	-19669E+00	97520E-01	0.
85000E+00	-27209E+00	30926E-13	34194E-14	0.	-25240E+00	10913E-01	0.
90000E+00	-25318E+00	29250E-13	28278E-14	0.	-31426E+00	-80090E-01	0.
THETA=	.17453E+01						
55000E+00	-31927E+00	29646E+00	43235E-02	0.	72309E-01	50571E+00	0.
60000E+00	-30165E+00	26411E+00	20328E-01	0.	-53896E-01	42496E+00	0.
65000E+00	-28250E+00	24336E+00	26902E-01	0.	-63582E-01	34805E+00	0.
70000E+00	-26343E+00	22896E+00	28575E-01	0.	-90892E-01	27126E+00	0.
75000E+00	-24477E+00	21779E+00	27609E-01	0.	-13021E+00	19254E+00	0.
80000E+00	-22715E+00	20790E+00	25175E-01	0.	-17837E+00	11075E+00	0.
85000E+00	-20981E+00	19803E+00	21896E-01	0.	-23354E+00	25204E-01	0.
90000E+00	-19269E+00	18729E+00	18107E-01	0.	-29460E+00	-64512E-01	0.
THETA=	.19199E+01						

R	UBAR	VBAP	WBAR	SIRP	SIRF	SITT	SIFF	SITF
.55000E+00	.11931E+00	-.55716E+00	0.	.20829E+00	-.81255E-02	.56394E-02	.55329E+00	0.
.60000E+00	.10137E+00	-.49637E+00	0.	.17199E+00	-.38203E-01	.10104E-01	.46415E+00	0.
.65000E+00	.84887E-01	-.45737E+00	0.	.12981E+00	-.50560E-01	-.68722E-02	.38366E+00	0.
.70000E+00	.69788E-01	-.43030E+00	0.	.81832E-01	-.53703E-01	-.37604E-01	.30611E+00	0.
.75000E+00	.55853E-01	-.40931E+00	0.	.28327E-01	-.51887E-01	-.77966E-01	.22842E+00	0.
.80000E+00	.42827E-01	-.39073E+00	0.	-.30459E-01	-.47313E-01	-.12564E+00	.14884E+00	0.
.85000E+00	.30462E-01	-.37218E+00	0.	-.94282E-01	-.41150E-01	-.17926E+00	.66355E-01	0.
.90000E+00	.18540E-01	-.35200E+00	0.	-.16296E+00	-.34031E-01	-.23802E+00	-.19659E-01	0.

FEE= .17453E+00									
THETA= 0.									
	USAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.19144E+01	0.	0.	.73100E+00	0.	0.	.80559E+00	.10299E+01	.40821E-01
.60000E+00	-.19355E+01	0.	0.	.73061E+00	0.	0.	.66708E+00	.85667E+00	.34501E-01
.65000E+00	-.19249E+01	0.	0.	.69955E+00	0.	0.	.57518E+00	.74052E+00	.30088E-01
.70000E+00	-.18996E+01	0.	0.	.65879E+00	0.	0.	.50906E+00	.65588E+00	.26719E-01
.75000E+00	-.18675E+01	0.	0.	.61720E+00	0.	0.	.45758E+00	.58908E+00	.23932E-01
.80000E+00	-.18318E+01	0.	0.	.57835E+00	0.	0.	.41448E+00	.53244E+00	.21466E-01
.85000E+00	-.17935E+01	0.	0.	.54343E+00	0.	0.	.37616E+00	.48149E+00	.19168E-01
.90000E+00	-.17527E+01	0.	0.	.51258E+00	0.	0.	.34041E+00	.43352E+00	.16945E-01
THETA= .17453E+00									
	USAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.18437E+01	.30256E+00	.35125E-01	.71318E+00	.44214E-02	.56368E-03	.77820E+00	.10133E+01	.40201E-01
.60000E+00	-.18647E+01	.26974E+00	.32384E-01	.71155E+00	.20710E-01	.22035E-02	.64465E+00	.84303E+00	.33977E-01
.65000E+00	-.18549E+01	.24868E+00	.30595E-01	.68011E+00	.27402E-01	.28787E-02	.55536E+00	.72818E+00	.29631E-01
.70000E+00	-.18310E+01	.23404E+00	.29260E-01	.63912E+00	.29102E-01	.30355E-02	.49049E+00	.64386E+00	.26313E-01
.75000E+00	-.18005E+01	.22266E+00	.28080E-01	.59714E+00	.28112E-01	.29004E-02	.43942E+00	.57673E+00	.23569E-01
.80000E+00	-.17665E+01	.21257E+00	.26865E-01	.55763E+00	.25625E-01	.25927E-02	.39620E+00	.51935E+00	.21140E-01
.85000E+00	-.17300E+01	.20246E+00	.25488E-01	.52173E+00	.22274E-01	.21772E-02	.35738E+00	.46737E+00	.18877E-01
.90000E+00	-.16909E+01	.19144E+00	.23858E-01	.48961E+00	.18401E-01	.16901E-02	.32087E+00	.41814E+00	.16688E-01
THETA= .34907E+00									
	USAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.16403E+01	.56862E+00	.69179E-01	.66186E+00	.83094E-02	.11102E-02	.69542E+00	.96542E+00	.38359E-01
.60000E+00	-.16608E+01	.50694E+00	.63785E-01	.65665E+00	.38923E-01	.43401E-02	.59007E+00	.80378E+00	.32421E-01
.65000E+00	-.16536E+01	.46736E+00	.60261E-01	.62414E+00	.51500E-01	.56700E-02	.49829E+00	.69267E+00	.28273E-01
.70000E+00	-.16337E+01	.43985E+00	.57630E-01	.58247E+00	.54654E-01	.59788E-02	.43702E+00	.60922E+00	.25108E-01
.75000E+00	-.16076E+01	.41347E+00	.55306E-01	.53937E+00	.52834E-01	.57127E-02	.38713E+00	.54118E+00	.22489E-01
.80000E+00	-.15784E+01	.39950E+00	.52914E-01	.49795E+00	.48159E-01	.51066E-02	.34354E+00	.48167E+00	.20172E-01
.85000E+00	-.15469E+01	.38049E+00	.50202E-01	.45927E+00	.41861E-01	.42883E-02	.30330E+00	.42671E+00	.18012E-01
.90000E+00	-.15131E+01	.35978E+00	.46991E-01	.42347E+00	.34582E-01	.33288E-02	.26460E+00	.37386E+00	.15923E-01
THETA= .52360E+00									
	USAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.13286E+01	.76610E+00	.10113E+00	.58325E+00	.11195E-01	.16230E-02	.57835E+00	.80210E+00	.35352E-01
.60000E+00	-.13484E+01	.68300E+00	.93247E-01	.57255E+00	.52440E-01	.63448E-02	.48112E+00	.74365E+00	.29879E-01
.65000E+00	-.13452E+01	.62967E+00	.85095E-01	.53838E+00	.69385E-01	.82890E-02	.41086E+00	.63827E+00	.26057E-01
.70000E+00	-.13313E+01	.59261E+00	.84250E-01	.49569E+00	.73689E-01	.87405E-02	.35509E+00	.55616E+00	.23140E-01
.75000E+00	-.13122E+01	.56381E+00	.80852E-01	.45087E+00	.71193E-01	.83514E-02	.30702E+00	.48670E+00	.20726E-01
.80000E+00	-.12903E+01	.53824E+00	.77255E-01	.40653E+00	.64885E-01	.74653E-02	.26287E+00	.42395E+00	.18590E-01
.85000E+00	-.12664E+01	.51264E+00	.73391E-01	.36356E+00	.56359E-01	.62691E-02	.22044E+00	.36442E+00	.16600E-01
.90000E+00	-.12406E+01	.48473E+00	.68697E-01	.32213E+00	.46592E-01	.48664E-02	.17840E+00	.30603E+00	.14675E-01
THETA= .69813E+00									
	USAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.94627E+00	.87118E+00	.13001E+00	.48682E+00	.12731E-01	.20865E-02	.43032E+00	.80216E+00	.31271E-01
.60000E+00	-.96520E+00	.77668E+00	.11988E+00	.46938E+00	.59633E-01	.81568E-02	.35973E+00	.66988E+00	.26430E-01
.65000E+00	-.96689E+00	.71603E+00	.11325E+00	.43318E+00	.78902E-01	.10656E-01	.30360E+00	.57154E+00	.23049E-01
.70000E+00	-.96034E+00	.67389E+00	.10831E+00	.38924E+00	.83796E-01	.11237E-01	.25458E+00	.49107E+00	.20468E-01
.75000E+00	-.94972E+00	.64114E+00	.10394E+00	.34231E+00	.80946E-01	.10736E-01	.20875E+00	.41988E+00	.18333E-01
.80000E+00	-.93686E+00	.61207E+00	.99446E-01	.29438E+00	.73785E-01	.95972E-02	.16392E+00	.35313E+00	.16444E-01
.85000E+00	-.92241E+00	.58295E+00	.94349E-01	.24616E+00	.64135E-01	.80593E-02	.11880E+00	.28801E+00	.14684E-01
.90000E+00	-.90641E+00	.55122E+00	.89315E-01	.19783E+00	.52983E-01	.62562E-02	.72651E-01	.22281E+00	.12981E-01
THETA= .87266E+00									
	USAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.53940E+00	.87118E+00	.15494E+00	.38420E+00	.12731E-01	.24866E-02	.27260E+00	.70645E+00	.26239E-01
.60000E+00	-.55741E+00	.77668E+00	.14286E+00	.35959E+00	.59633E-01	.97208E-02	.23056E+00	.59138E+00	.22177E-01
.65000E+00	-.56428E+00	.71603E+00	.13497E+00	.32123E+00	.78902E-01	.12699E-01	.18947E+00	.50052E+00	.19340E-01



R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	.15462E+00	-.56862E+00	.19007E+00	-.20915E+00	-.83094E-02	.30503E-02	.35765E-02	.54318E+00	-.13962E-01
.60000E+00	.13818E+00	-.50694E+00	.17525E+00	.17231E+00	-.38923E-01	.11924E-01	.10230E-01	.45748E+00	-.11800E-01
.65000E+00	.12246E+00	-.46736E+00	.16556E+00	.13027E+00	-.51500E-01	.15578E-01	-.52248E-02	.37938E+00	-.10291E-01
.70000E+00	.10772E+00	-.43985E+00	.15834E+00	.82712E-01	-.54694E-01	.16427E-01	-.34798E-01	.30365E+00	-.91385E-02
.75000E+00	.93894E-01	-.41847E+00	.15195E+00	.29712E-01	-.52834E-01	.15695E-01	-.74199E-01	.22747E+00	-.81853E-02
.80000E+00	.80793E-01	-.39950E+00	.14538E+00	-.28550E-01	-.48159E-01	.14030E-01	-.12102E+00	.14923E+00	-.73418E-02
.85000E+00	.68199E-01	-.38049E+00	.13793E+00	-.91979E-01	-.41861E-01	.11782E-01	-.17385E+00	.67996E-01	-.65558E-02
.90000E+00	.55898E-01	-.35978E+00	.12911E+00	-.16010E+00	-.34582E-01	.91459E-02	-.23183E+00	-.16804E-01	-.57956E-02

FEE= .34907E+00  
THETA= 0.

R	UBAR	VRAR	WBAR	SIPR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.19144E+01	0.	0.	.73100E+00	0.	0.	.82632E+00	.10092E+01	.76718E-01
.60000E+00	-.19355E+01	0.	0.	.73061E+00	0.	0.	.83915E+00	.83915E+00	.64841E-01
.65000E+00	-.19249E+01	0.	0.	.69955E+00	0.	0.	.59046E+00	.72524E+00	.56547E-01
.70000E+00	-.18996E+01	0.	0.	.65879E+00	0.	0.	.52263E+00	.64232E+00	.50216E-01
.75000E+00	-.18675E+01	0.	0.	.61720E+00	0.	0.	.46973E+00	.57603E+00	.44378E-01
.80000E+00	-.18318E+01	0.	0.	.57835E+00	0.	0.	.42539E+00	.52154E+00	.40343E-01
.85000E+00	-.17935E+01	0.	0.	.54343E+00	0.	0.	.38589E+00	.47175E+00	.36024E-01
.90000E+00	-.17527E+01	0.	0.	.51258E+00	0.	0.	.34901E+00	.42492E+00	.31846E-01

THETA= .17453E+00

R	UBAR	VRAR	WBAR	SIPR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.18403E+01	.32012E+00	.66010E-01	.71326E+00	.47032E-02	.10594E-02	.79802E+00	.99227E+00	.75553E-01
.60000E+00	-.18611E+01	.28593E+00	.60863E-01	.71158E+00	.21812E-01	.41413E-02	.66158E+00	.82546E+00	.63856E-01
.65000E+00	-.19512E+01	.26397E+00	.57500E-01	.68016E+00	.28842E-01	.54102E-02	.57028E+00	.71301E+00	.55688E-01
.70000E+00	-.18273E+01	.24867E+00	.54990E-01	.63920E+00	.30620E-01	.57049E-02	.50387E+00	.63051E+00	.49453E-01
.75000E+00	-.17967E+01	.23670E+00	.52772E-01	.59728E+00	.29563E-01	.54510E-02	.45152E+00	.56490E+00	.44295E-01
.80000E+00	-.17627E+01	.22600E+00	.50490E-01	.55781E+00	.26921E-01	.48726E-02	.40718E+00	.50887E+00	.39730E-01
.85000E+00	-.17262E+01	.21520E+00	.47902E-01	.52197E+00	.23362E-01	.40918E-02	.36731E+00	.45813E+00	.35477E-01
.90000E+00	-.16872E+01	.20337E+00	.44838E-01	.48989E+00	.19246E-01	.31763E-02	.32979E+00	.41011E+00	.31363E-01

THETA= .34907E+00

R	UBAR	VRAR	WBAR	SIPR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.16268E+01	.60163E+00	.13001E+00	.66220E+00	.88391E-02	.20805E-02	.71654E+00	.94359E+00	.72092E-01
.60000E+00	-.16467E+01	.53737E+00	.11988E+00	.65678E+00	.40993E-01	.81568E-02	.59531E+00	.78604E+00	.60931E-01
.65000E+00	-.16393E+01	.49611E+00	.11325E+00	.62432E+00	.54205E-01	.10656E-01	.51218E+00	.67779E+00	.52137E-01
.70000E+00	-.16192E+01	.46735E+00	.10831E+00	.58251E+00	.57547E-01	.11237E-01	.44985E+00	.59652E+00	.47187E-01
.75000E+00	-.15931E+01	.44486E+00	.10394E+00	.53990E+00	.55559E-01	.10736E-01	.39911E+00	.53028E+00	.42265E-01
.80000E+00	-.15639E+01	.42474E+00	.90440E-01	.49868E+00	.50596E-01	.95972E-02	.35476E+00	.47237E+00	.37910E-01
.85000E+00	-.15325E+01	.40445E+00	.94349E-01	.46018E+00	.43907E-01	.80593E-02	.31381E+00	.41889E+00	.33851E-01
.90000E+00	-.14988E+01	.38220E+00	.88315E-01	.42456E+00	.36170E-01	.62562E-02	.27443E+00	.36749E+00	.29926E-01

THETA= .52360E+00

R	UBAR	VRAR	WBAR	SIPR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.12998E+01	.81057E+00	.19007E+00	.58396E+00	.11909E-01	.30503E-02	.59170E+00	.86901E+00	.66440E-01
.60000E+00	-.13184E+01	.72400E+00	.17525E+00	.57281E+00	.55230E-01	.11924E-01	.49378E+00	.72566E+00	.56154E-01
.65000E+00	-.13146E+01	.66840E+00	.16556E+00	.53976E+00	.73030E-01	.15578E-01	.42315E+00	.62383E+00	.49971E-01
.70000E+00	-.13003E+01	.62966E+00	.15834E+00	.49641E+00	.77532E-01	.16427E-01	.36710E+00	.54443E+00	.43488E-01
.75000E+00	-.12812E+01	.59936E+00	.15195E+00	.45200E+00	.74855E-01	.15695E-01	.31880E+00	.47722E+00	.38952E-01
.80000E+00	-.12593E+01	.57226E+00	.14538E+00	.40308E+00	.68167E-01	.14030E-01	.27445E+00	.41645E+00	.34938E-01
.85000E+00	-.12357E+01	.54491E+00	.13793E+00	.36552E+00	.59156E-01	.11782E-01	.23183E+00	.35878E+00	.31198E-01
.90000E+00	-.12102E+01	.51494E+00	.12911E+00	.32447E+00	.48732E-01	.91459E-02	.19961E+00	.30219E+00	.27580E-01

THETA= .69813E+00

R	UBAR	VRAR	WBAR	SIPR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.89870E+00	.92175E+00	.24435E+00	.48799E+00	.13542E-01	.39214E-02	.43857E+00	.77752E+00	.58770E-01
.60000E+00	-.91561E+00	.82330E+00	.22529E+00	.46981E+00	.62805E-01	.15330E-01	.36922E+00	.65158E+00	.49671E-01
.65000E+00	-.91627E+00	.76008E+00	.21285E+00	.43380E+00	.83046E-01	.20027E-01	.31355E+00	.55765E+00	.43317E-01
.70000E+00	-.90923E+00	.71602E+00	.20356E+00	.39042E+00	.88167E-01	.21118E-01	.25558E+00	.48054E+00	.38467E-01
.75000E+00	-.89847E+00	.68156E+00	.19535E+00	.34418E+00	.85122E-01	.20178E-01	.22029E+00	.41214E+00	.34455E-01
.80000E+00	-.88571E+00	.65074E+00	.18690E+00	.29695E+00	.77517E-01	.18037E-01	.17594E+00	.34786E+00	.30905E-01
.85000E+00	-.87156E+00	.61965E+00	.17732E+00	.26940E+00	.67269E-01	.15147E-01	.13128E+00	.28504E+00	.27596E-01
.90000E+00	-.85609E+00	.58557E+00	.16598E+00	.20168E+00	.55416E-01	.11758E-01	.95571E-01	.22208E+00	.24396E-01

THETA= .87266E+00

R	UBAR	VRAR	WBAR	SIPR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.47183E+00	.92175E+00	.29129E+00	.38586E+00	.13542E-01	.46734E-02	.27561E+00	.69016E+00	.49314E-01
.60000E+00	-.48697E+00	.82330E+00	.26849E+00	.36021E+00	.62805E-01	.18269E-01	.23668E+00	.57275E+00	.41679E-01
.65000E+00	-.49238E+00	.76008E+00	.25366E+00	.32212E+00	.83046E-01	.23867E-01	.19774E+00	.49721E+00	.36348E-01







R	URAR	VRAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	.25629E+00	-.60163E+00	.35721E+00	.21165E+00	-.88391E-02	.57327F-02	-.23633E-02	.51409E+00	-.26239E-01
.60000E+00	.24417E+00	-.53737E+00	.32936E+00	.17324E+00	-.40993E-01	.22410E-01	.10593E-01	.43828E+00	-.22177E-01
.65000E+00	.23065E+00	-.49611F+00	.31116E+00	.13160E+00	-.54205E-01	.29277E-01	-.48149E-03	.36706E+00	-.19340E-01
.70000E+00	.21695E+00	-.46735E+00	.29758E+00	.85246E-01	-.57547E-01	.30872E-01	-.26717E-01	.29658E+00	-.17175E-01
.75000E+00	.20343F+00	-.44486E+00	.28558E+00	.33712E-01	-.55559E-01	.29498E-01	-.63354E-01	.22474F+00	-.15383E-01
.80000E+00	.19011E+00	-.42474E+00	.27323E+00	-.23054E-01	-.50556E-01	.26368E-01	-.10772E+00	.15036E+00	-.13798E-01
.85000E+00	.17686E+00	-.40445F+00	.25922E+00	-.84959E-01	-.43907E-01	.22143E-01	-.15825E+00	.72723E-01	-.12321E-01
.90000E+00	.16346E+00	-.38220E+00	.24264E+00	-.15186E+00	-.36170E-01	.17189E-01	-.21400E+00	-.85850E-02	-.10892E-01

FEE= .52360E+00  
THETA= 0.

URAP	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
R					0.			
.55000E+00	-.19144E+01	0.	.73100E+00	0.		.85807E+00	.97742E+00	.10336E+00
.60000E+00	-.19355E+01	0.	.73061E+00	0.	0.	.71144E+00	.81231E+00	.87360E-01
.65000E+00	-.19249E+01	0.	.69955E+00	0.	0.	.61386E+00	.70184E+00	.76185E-01
.70000E+00	-.18996E+01	0.	.65879E+00	0.	0.	.54341E+00	.62153E+00	.67655E-01
.75000E+00	-.18675E+01	0.	.61720E+00	0.	0.	.48834E+00	.55832E+00	.60599E-01
.80000E+00	-.18318E+01	0.	.57835E+00	0.	0.	.44208E+00	.50484E+00	.54354E-01
.85000E+00	-.17935E+01	0.	.54343E+00	0.	0.	.40080E+00	.45684E+00	.48535E-01
.90000E+00	-.17527E+01	0.	.51258E+00	0.	0.	.36219E+00	.41174E+00	.42907E-01

THETA= .17453E+00

URAP	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
R								
.55000E+00	-.18349E+01	.88935E-01	.71139E+00	.51350E-02	.14273E-02	.82838E+00	.96008E+00	.10179E+00
.60000E+00	-.18555E+01	.82000E-01	.71163E+00	.23500E-01	.55795E-02	.68752E+00	.79853E+00	.86033E-01
.65000E+00	-.18456E+01	.77470E-01	.68023E+00	.31047E-01	.72892E-02	.59313E+00	.68976E+00	.75028E-01
.70000E+00	-.18216E+01	.74088E-01	.63934E+00	.32945E-01	.76862E-02	.52437E+00	.61007E+00	.66628E-01
.75000E+00	-.17910E+01	.71100E-01	.59749E+00	.31784E-01	.73441E-02	.47007E+00	.54678E+00	.59678E-01
.80000E+00	-.17570E+01	.68025E-01	.55810E+00	.28908E-01	.65649E-02	.42400E+00	.49280E+00	.53528E-01
.85000E+00	-.17206E+01	.64539E-01	.52233E+00	.25030E-01	.55129E-02	.38253E+00	.44397E+00	.47798E-01
.90000E+00	-.16816E+01	.60411E-01	.49032E+00	.20540E-01	.42795E-02	.34345E+00	.39781E+00	.42255E-01

THETA= .34907E+00

URAP	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
R								
.55000E+00	-.16062E+01	.17517E+00	.66270E+00	.96506E-02	.28112E-02	.74288E+00	.91014E+00	.97129E-01
.60000E+00	-.16252E+01	.16151E+00	.65696E+00	.44166E-01	.10990E-01	.61867E+00	.75886E+00	.82092E-01
.65000E+00	-.16173E+01	.15259E+00	.62459E+00	.58349E-01	.14357E-01	.53344E+00	.65499E+00	.71591E-01
.70000E+00	-.15970E+01	.14592E+00	.58322E+00	.61917E-01	.15139E-01	.46953E+00	.57705E+00	.63575E-01
.75000E+00	-.15709E+01	.14004E+00	.54072E+00	.59735E-01	.14465E-01	.41746E+00	.51357E+00	.56944E-01
.80000E+00	-.15417E+01	.13398E+00	.49980E+00	.54328E-01	.12930E-01	.37195E+00	.45811E+00	.51076E-01
.85000E+00	-.15105E+01	.12712E+00	.46159E+00	.47041E-01	.10858E-01	.32991E+00	.40692E+00	.45608E-01
.90000E+00	-.14770E+01	.11899E+00	.42623E+00	.38603E-01	.84289E-02	.28948E+00	.35772E+00	.40319E-01

THETA= .52360E+00

URAP	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
R								
.55000E+00	-.12557E+01	.25608E+00	.58504E+00	.13002E-01	.41097E-02	.61189E+00	.83363E+00	.89514E-01
.60000E+00	-.12724E+01	.23611E+00	.57321E+00	.59504E-01	.16066E-01	.51317E+00	.69809E+00	.75656E-01
.65000E+00	-.12677E+01	.22306E+00	.53934E+00	.78614E-01	.20988E-01	.44199E+00	.60171E+00	.65978E-01
.70000E+00	-.12530E+01	.21333E+00	.49751E+00	.83420E-01	.22132E-01	.38550E+00	.52647E+00	.58591E-01
.75000E+00	-.12336E+01	.20472E+00	.45374E+00	.80481E-01	.21146E-01	.33685E+00	.46269E+00	.52480E-01
.80000E+00	-.12119E+01	.19587E+00	.41047E+00	.73196E-01	.18903E-01	.29219E+00	.40497E+00	.47072E-01
.85000E+00	-.11885E+01	.18583E+00	.36852E+00	.63379E-01	.15874E-01	.24929E+00	.35014E+00	.42033E-01
.90000E+00	-.11635E+01	.17395E+00	.32804E+00	.52010E-01	.12322E-01	.20679E+00	.29630E+00	.37158E-01

THETA= .69813E+00

URAP	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
R								
.55000E+00	-.82581E+00	.32921E+00	.48978E+00	.14786E-01	.52833E-02	.45120E+00	.73977E+00	.79180E-01
.60000E+00	-.83963E+00	.30354E+00	.47048E+00	.67666E-01	.20654E-01	.38376E+00	.62353E+00	.66922E-01
.65000E+00	-.83871E+00	.28677E+00	.43476E+00	.89396E-01	.26982E-01	.32981E+00	.536E+00	.58361E-01
.70000E+00	-.83093E+00	.27425E+00	.39224E+00	.94862E-01	.28452E-01	.28244E+00	.46442E+00	.51827E-01
.75000E+00	-.81994E+00	.26319E+00	.37405E+00	.91520E-01	.27185E-01	.23797E+00	.40028E+00	.46421E-01
.80000E+00	-.80734E+00	.25181E+00	.30089E+00	.83236E-01	.24301E-01	.19436E+00	.33978E+00	.41638E-01
.85000E+00	-.79367E+00	.23890E+00	.25436E+00	.72072E-01	.20407E-01	.15040E+00	.28050E+00	.37180E-01
.90000E+00	-.77897E+00	.22362E+00	.20759E+00	.59144E-01	.15841E-01	.10537E+00	.22096E+00	.32868E-01

THETA= .87266E+00

URAP	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
R								
.55000E+00	-.36831E+00	.39233E+00	.38840E+00	.14786E-01	.62964E-02	.28021E+00	.63989E+00	.66440E-01
.60000E+00	-.37906E+00	.36174E+00	.36115E+00	.67666E-01	.24614E-01	.24605E+00	.54419E+00	.56154E-01
.65000E+00	-.38223E+00	.34175E+00	.32347E+00	.89396E-01	.32156E-01	.21042E+00	.46682E+00	.48971E-01

70000E+00	-38180E+00	78056E+00	32684E+00	28021E+00	54962E-01	33908E-01	17275E+00	39838E+00	43488E-01
75000E+00	-37970E+00	74350E+00	31366E+00	23351E+00	91520F-01	32398E-01	13275E+00	33866E+00	38952E-01
80000E+00	-37680E+00	71000E+00	28009E+00	18427E+00	83236E-01	28961E-01	90246E+01	27041E+00	34938E-01
85000E+00	-37345E+00	67587E+00	30071E+00	13287E+00	72072E-01	24320E-01	45156E-01	20618E+00	31198E-01
90000E+00	-36975E+00	63819E+00	26650E+00	79404E-01	59144E-01	18979E-01	-25723E-02	14078E+00	27580E-01
THETA= .10472E+01									
55000E+00	61599E-01	87870E+00	44354E+00	29314E+00	13002E-01	71182E-02	11953E+00	54604E+00	51681E-01
60000E+00	53732E-01	78681E+00	40895E+00	25842E+00	59504E-01	27827E-01	11664E+00	46964E+00	43680E-01
65000E+00	46728E-01	72775E+00	38636E+00	21890E+00	74614E-01	36353E-01	98239E-01	40146E+00	38093E-01
70000E+00	40240E-01	68641E+00	36949E+00	17495E+00	83420E-01	38333E-01	69685E-01	33633E+00	33828E-01
75000E+00	33997E-01	65382E+00	35459E+00	12682E+00	80481E-01	36627E-01	33869E-01	27145E+00	30299E-01
80000E+00	27744E-01	62437E+00	33926E+00	74695E-01	73196E-01	32741E-01	-75880E-02	20522E+00	27177E-01
85000E+00	21428E-01	59435E+00	32137E+00	18709E-01	63379E-01	27494E-01	-53736E-01	13674E+00	24267E-01
90000E+00	14788E-01	56122E+00	30128E+00	-44049E-01	52010E-01	21343E-01	-10400E+00	65430E-01	21453E-01
THETA= .12217E+01									
55000E+00	41206E+00	65220E+00	48127E+00	21548E+00	96506E-02	77237E-02	-11464E-01	46953E+00	35352E-01
60000E+00	40655E+00	58399E+00	44374E+00	17467E+00	44166E-01	30194E-01	-11149E-01	40886E+00	29879E-01
65000E+00	39641E+00	54016E+00	41922E+00	13365E+00	58349E-01	39445E-01	67958E-02	34819E+00	26057E-01
70000E+00	38429E+00	50947E+00	40093E+00	89129E-01	61917E-01	41594E-01	-14336E-01	28575E+00	23140E-01
75000E+00	37124E+00	48528E+00	38476E+00	39841E-01	59735E-01	39742E-01	-46738E-01	22056E+00	20726E-01
80000E+00	35760E+00	46342E+00	36812E+00	-14634E-01	54328E-01	35526E-01	-87343E-01	15208E+00	18590F-01
85000E+00	34333E+00	44114E+00	34925E+00	-74357E-01	47041E-01	29833E-01	-13435E+00	79965E-01	16600E-01
90000E+00	32827E+00	41655E+00	32691E+00	-13924E+00	38603E-01	23158E-01	-18669E+00	40080E-02	14675E-01
THETA= .13963E+01									
55000E+00	64081E+00	34703E+00	50437E+00	16479E+00	51350E-02	80945E-02	-96961E-01	41959E+00	17949E-01
60000E+00	63683E+00	31074E+00	46504E+00	12001E+00	23500E-01	31643E-01	-57707E-01	36919E+00	15170E-01
65000E+00	62466E+00	28741E+00	43935E+00	78004E-01	31047E-01	41339E-01	-52906E-01	31342E+00	13229E-01
70000E+00	60886E+00	27108E+00	42017E+00	33117E-01	32945E-01	43591E-01	-69178E-01	25273E+00	11748E-01
75000E+00	59137E+00	25821E+00	40945E+00	-16929E-01	31784E-01	41650E-01	-99350E-01	18736E+00	10523E-01
80000E+00	57287E+00	24658E+00	38579E+00	-72940E-01	28908E-01	37231E-01	-13940E+00	11740E+00	94385E-02
85000E+00	55344E+00	23473E+00	36602E+00	-13510E+00	25030E-01	31265E-01	-18697E+00	42908E-01	84280E-02
90000E+00	53287E+00	22164E+00	34261E+00	-20333E+00	20540E-01	24270E-01	-24066E+00	-34082E-01	74507E-02
THETA= .15708E+01									
55000E+00	72026E+00	54195E-13	51216E+00	14719E+00	80193E-15	82194E-02	-12665E+00	40224E+00	27605F-14
60000E+00	71681E+03	48528E-13	47222E+00	10102E+00	36700E-14	32131E-01	-81621E-01	35541E+00	23331E-14
65000E+00	70392E+00	44885E-13	44613E+00	58680E-01	48486E-14	41977E-01	-73637E-01	30134E+00	20346E-14
70000E+00	68685E+00	42335E-13	42666E+00	13664E-01	51451E-14	44263E-01	-88224E-01	24127E+00	18063E-14
75000E+00	66782E+00	40325E-13	40945E+00	-36645E-01	49638E-14	42293E-01	-11762E+00	17582E+00	16184E-14
80000E+00	64763E+00	38509E-13	39174E+00	-93190E-01	45145E-14	37806E-01	-15748E+00	10535E+00	14516E-14
85000E+00	62641E+00	36657E-13	37166E+00	-15620E+00	39090E-14	31748E-01	-20525E+00	30038E-01	12962E-14
90000E+00	60393E+00	34614E-13	34789E+00	-22559E+00	32078E-14	24645E-01	-25940E+00	-50006E-01	11456E-14
THETA= .17453E+01									
55000E+00	6401E+00	34703E+00	50437E+00	16479E+00	51350E-02	80945E-02	-96961E-01	41959E+00	17949E-01
60000E+00	63683E+00	31074E+00	46504E+00	12001E+00	23500E-01	31643E-01	-57707E-01	36919E+00	15170E-01
65000E+00	62466E+00	28741E+00	43935E+00	78004E-01	31047E-01	41339E-01	-52906E-01	31342E+00	13229E-01
70000E+00	60886E+00	27108E+00	42017E+00	33117E-01	32945E-01	43591E-01	-69178E-01	25273E+00	11748E-01
75000E+00	59137E+00	25821E+00	40945E+00	-16929E-01	31784E-01	41650E-01	-99350E-01	18736E+00	10523E-01
80000E+00	57287E+00	24658E+00	38579E+00	-72940E-01	28908E-01	37231E-01	-13940E+00	11740E+00	94385E-02
85000E+00	55344E+00	23473E+00	36602E+00	-13510E+00	25030E-01	31265E-01	-18697E+00	42908E-01	84280E-02
90000E+00	53287E+00	22164E+00	34261E+00	-20333E+00	20540E-01	24270E-01	-24066E+00	-36082E-01	74507E-02
THETA= .19199F+01									

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	.41206E+00	-.65220E+00	.48127E+00	.21548E+00	-.96506E-02	.77237E-02	-.11464E-01	.46953E+00	-.35352E-01
.60000E+00	.40655E+00	-.58399E+00	.44374E+00	.17467E+00	-.44166E-01	.30194E-01	.11149E-01	.40886E+00	-.29879E-01
.65000E+00	.39641E+00	-.54016E+00	.41922E+00	.13365E+00	-.58349E-01	.39445E-01	.67858E-02	.34819E+00	-.26057E-01
.70000E+00	.38429E+00	-.50947E+00	.40093E+00	.89129E-01	-.61917E-01	.41594E-01	-.14336E-01	.28575E+00	-.23140E-01
.75000E+00	.37124E+00	-.48528E+00	.38476E+00	.39841E-01	-.59735E-01	.39742E-01	-.46738E-01	.22056E+00	-.20726E-01
.80000E+00	.35760E+00	-.46342E+00	.36812E+00	-.14634E-01	-.54328E-01	.35526E-01	-.87343E-01	.15208E+00	-.18590E-01
.85000E+00	.34333E+00	-.44114E+00	.34925E+00	-.74357E-01	-.47041E-01	.27833E-01	-.13435E+00	.79965E-01	-.16600E-01
.90000E+00	.32827E+00	-.41655E+00	.32691E+00	-.13924E+00	-.38603E-01	.23158E-01	-.18669E+00	.40080E-02	-.14675E-01

FEE= .69813E+00

THETA= 0.

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.19144E+01	0.	0.	.73100E+00	0.	0.	-.89702E+00	-.93847E+00	-.11754E+00
.60000E+00	-.19355E+01	0.	0.	.73061E+00	0.	0.	-.64236E+00	-.77939E+00	-.99343E-01
.65000E+00	-.19249E+01	0.	0.	.69955E+00	0.	0.	-.64257E+00	-.67313E+00	-.86635E-01
.70000E+00	-.18996E+01	0.	0.	.65879E+00	0.	0.	-.56891E+00	-.59604E+00	-.76935E-01
.75000E+00	-.18675E+01	0.	0.	.61720E+00	0.	0.	-.51118E+00	-.53548E+00	-.68910E-01
.80000E+00	-.18318E+01	0.	0.	.57835E+00	0.	0.	-.46256E+00	-.48436E+00	-.61809E-01
.85000E+00	-.17935E+01	0.	0.	.54143E+00	0.	0.	-.41909E+00	-.43855E+00	-.55192E-01
.90000E+00	-.17527E+01	0.	0.	.51258E+00	0.	0.	-.37836E+00	-.39557E+00	-.48792E-01
THETA= .17453E+00									
R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.18284E+01	-.38003E+00	.10113E+00	.71355E+00	.56647E-02	.16230E-02	.86562E+00	.92059E+00	.11575E+00
.60000E+00	-.18487E+01	.34117E+00	.93247E-01	.71169E+00	.25571E-01	.63448E-02	.71934E+00	.76551E+00	.97833E-01
.65000E+00	-.18386E+01	.31616E+00	.88095E-01	.68032E+00	.33752E-01	.82890E-02	.62117E+00	.66124E+00	.85318E-01
.70000E+00	-.18146E+01	.29858E+00	.84250E-01	.63950E+00	.35798E-01	.87405E-02	.54951E+00	.58499E+00	.75766E-01
.75000E+00	-.17840E+01	.28460E+00	.80852E-01	.59774E+00	.34510E-01	.83514E-02	.49282E+00	.52455E+00	.67863E-01
.80000E+00	-.17500E+01	.27183E+00	.77355E-01	.55845E+00	.31344E-01	.74653E-02	.44464E+00	.47309E+00	.60870E-01
.85000E+00	-.17136E+01	.25868E+00	.73391E-01	.52278E+00	.27076E-01	.62691E-02	.40119E+00	.42661E+00	.54353E-01
.90000E+00	-.16747E+01	.24406E+00	.68697E-01	.49085E+00	.22129E-01	.48664E-02	.36021E+00	.39272E+00	.48050E-01
THETA= .34907E+00									
R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.15809E+01	.71422E+00	.19919E+00	.66332E+00	.10666E-01	.31968E-02	.77519E+00	.86910E+00	.11045E+00
.60000E+00	-.15988E+01	.64119E+00	.18366E+00	.65720E+00	.48057E-01	.12497E-01	.64732E+00	.72552E+00	.93352E-01
.65000E+00	-.15904E+01	.59419E+00	.17351E+00	.62492E+00	.63433E-01	.16326E-01	.55953E+00	.62701E+00	.81410E-01
.70000E+00	-.15498E+01	.56115E+00	.16594E+00	.58396E+00	.67278E-01	.17215E-01	.49365E+00	.55317E+00	.72295E-01
.75000E+00	-.15436E+01	.53487E+00	.15925E+00	.54711E+00	.64857E-01	.16449E-01	.43997E+00	.49308E+00	.64754E-01
.80000E+00	-.15145E+01	.51087E+00	.15236E+00	.50116E+00	.58907E-01	.14704E-01	.39303E+00	.44062E+00	.58082E-01
.85000E+00	-.14834E+01	.48615E+00	.14455E+00	.46331E+00	.50886E-01	.12348E-01	.34966E+00	.39223E+00	.51863E-01
.90000E+00	-.14502E+01	.45868E+00	.13531E+00	.42828E+00	.41588E-01	.95850E-02	.30795E+00	.34574E+00	.45849E-01
THETA= .52360E+00									
R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.12016E+01	.96227E+00	.29120E+00	.58637E+00	.14343E-01	.46734E-02	.63665E+00	.79023E+00	.10179E+00
.60000E+00	-.12160E+01	.86387E+00	.26849E+00	.57371E+00	.64747E-01	.18269E-01	.53697E+00	.66427E+00	.86333E-01
.65000E+00	-.12101E+01	.80055E+00	.25366E+00	.54005E+00	.85463E-01	.23867E-01	.46509E+00	.57458E+00	.75028E-01
.70000E+00	-.11949E+01	.75603E+00	.24259E+00	.49886E+00	.90643E-01	.25167E-01	.40808E+00	.50443E+00	.66628E-01
.75000E+00	-.11754E+01	.72063E+00	.23280E+00	.45587E+00	.87382E-01	.24047E-01	.35899E+00	.44487E+00	.59678E-01
.80000E+00	-.11538E+01	.68829E+00	.22274E+00	.41339E+00	.79365E-01	.21496E-01	.31395E+00	.39089E+00	.53528E-01
.85000E+00	-.11307E+01	.65499E+00	.21132E+00	.37220E+00	.68559E-01	.18051E-01	.27070E+00	.31955E+00	.47798E-01
.90000E+00	-.11063E+01	.61798E+00	.19780E+00	.33242E+00	.56032E-01	.14012E-01	.22787E+00	.28908E+00	.42255E-01
THETA= .69813E+00									
R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.73640E+00	.10943E+01	.37436E+00	.49197E+00	.16311E-01	.60080E-02	.46671E+00	.69346E+00	.90040E-01
.60000E+00	-.74642E+00	.98235E+00	.34517E+00	.47130E+00	.73628E-01	.23486E-01	.40160E+00	.58913E+00	.76101E-01
.65000E+00	-.74356E+00	.91035E+00	.32610E+00	.43593E+00	.57185E-01	.30683E-01	.34925E+00	.51025E+00	.66366E-01
.70000E+00	-.73488E+00	.85973E+00	.31186E+00	.39447E+00	.10308E+00	.32354E-01	.30311E+00	.44463E+00	.58936E-01
.75000E+00	-.72362E+00	.81948E+00	.29929E+00	.35057E+00	.59367E-01	.30914E-01	.25966E+00	.38573E+00	.52788E-01
.80000E+00	-.71121E+00	.78269E+00	.27929E+00	.30572E+00	.90251E-01	.27634E-01	.21695E+00	.32987E+00	.47349E-01
.85000E+00	-.69811E+00	.74483E+00	.26167E+00	.26045E+00	.77963E-01	.23206E-01	.17384E+00	.27492E+00	.42279E-01
.90000E+00	-.68437E+00	.70275E+00	.25429E+00	.21483E+00	.63717E-01	.18014E-01	.12965E+00	.21958E+00	.37377E-01
THETA= .87266E+00									
R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.24132E+00	.10943E+01	.44615E+00	.39152E+00	.16311E-01	.71600E-02	.28586E+00	.59049E+00	.75553E-01
.60000E+00	-.24669E+00	.98235E+00	.41136E+00	.36232E+00	.73628E-01	.27990E-01	.25755E+00	.50916E+00	.63856E-01
.65000E+00	-.24710E+00	.91035E+00	.38863E+00	.32514E+00	.97185E-01	.36567E-01	.22598E+00	.44180E+00	.55688E-01

.70000E+00 -24538E+00 .85973E+00 .37167E+00 .28338E+00 .10308E+00 .38558E-01 .19140E+00 .38100E+00 .49453E-01  
 .75000E+00 -24289E+00 .81948E+00 .35688E+00 .23850E+00 .99367E-01 .36842E-01 .15395E+00 .32279E+00 .44295E-01  
 .80000E+00 -24026E+00 .78269E+00 .34125E+00 .19114E+00 .90251E-01 .32933E-01 .11373E+00 .26495E+00 .39730E-01  
 .85000E+00 -23774E+00 .74483E+00 .32376E+00 .14151E+00 .77963E-01 .27656E-01 .70772E-01 .20615E+00 .35477E-01  
 .90000E+00 -23540E+00 .70275E+00 .30303E+00 .89691E-01 .63717E-01 .21468E-01 .25119E-01 .14562E+00 .31363E-01  
 THETA= .10472F+01

R  
 .55000E+00 .22390E+00 .96227E+00 .50437E+00 .29712E+00 .14343E-01 .80945E-02 .11591E+00 .49373E+00 .58770E-01  
 .60000E+00 .22292E+00 .86387E+00 .46504E+00 .25990E+00 .64747E-01 .31643E-01 .12218E+00 .43402E+00 .49671E-01  
 .65000E+00 .21943E+00 .80055E+00 .43935E+00 .22103F+00 .85463E-01 .43339E-01 .11014F+00 .37747E+00 .43402E+00  
 .70000E+00 .21459E+00 .75603E+00 .42017E+00 .17899E+00 .90643E-01 .43591E-01 .86425E-01 .32120E+00 .38467E-01  
 .75000E+00 .20884E+00 .72063E+00 .43023E+00 .13320E+00 .87382E-01 .41650E-01 .54621E-01 .26365E+00 .34455E-01  
 .80000E+00 .20229E+00 .68829E+00 .38579E+00 .83468E-01 .79365E-01 .37231E-01 .16728E-01 .20394E+00 .30905E-01  
 .85000E+00 .19488E+00 .65499E+00 .36602E+00 .29755E-01 .68559E-01 .31265E-01 .26084E-01 .14153E+00 .27596E-01  
 .90000E+00 .18649E+00 .61798E+00 .34261E+00 .27901E-01 .56032E-01 .24270E-01 .73105E-01 .76115E-01 .24396E-01  
 THETA= .12217F+01

R  
 .55000E+00 .60315E+00 .71422E+00 .54728E+00 .22017E+00 .10646E-01 .87831E-02 .22627E-01 .41485E+00 .40201E-01  
 .60000E+00 .60574E+00 .64119E+00 .50460E+00 .17642E+00 .48057E-01 .34335E-01 .11831E-01 .37277E+00 .33977E-01  
 .65000E+00 .59975E+00 .59419E+00 .47672E+00 .13616F+00 .63433E-01 .44856E-01 .15700E-01 .32504E+00 .29631E-01  
 .70000E+00 .58957E+00 .56115E+00 .45592E+00 .93892E-01 .67278E-01 .47299E-01 .85057E-03 .27246E+00 .26313E-01  
 .75000E+00 .57710E+00 .53487E+00 .43739E+00 .47359E-01 .64857E-01 .45193E-01 .26355E-01 .21544E+00 .23569E-01  
 .80000E+00 .56305E+00 .51087E+00 .41861E+00 .43060E-02 .58907F-01 .40398E-01 .62347E-01 .15420E+00 .21140E-01  
 .85000E+00 .54755E+00 .48615E+00 .39715E+00 .61351E-01 .50866E-01 .33925E-01 .10504E+00 .88849E-01 .18877E-01  
 .90000E+00 .53043E+00 .45868E+00 .37175E+00 .12376E+00 .41588E-01 .26335E-01 .15318E+00 .19456E-01 .16688E-01  
 THETA= .13963E+01

R  
 .55000E+00 .85068E+00 .38003E+00 .57355E+00 .16994E+00 .56647E-02 .92047E-02 .11305E+00 .36337E+00 .20410E-01  
 .60000E+00 .85561E+00 .34117E+00 .52883E+00 .12193E+00 .2571E-01 .35983E-01 .60195E-01 .33279E+00 .17251E-01  
 .65000E+00 .84798E+00 .31616E+00 .49611F+00 .80759E-01 .37352E-01 .47009E-01 .45938E-01 .29081E+00 .15044E-01  
 .70000E+00 .83432E+00 .29858E+00 .47780E+00 .38348E-01 .35798E-01 .49570E-01 .55004E-01 .24064E+00 .13360E-01  
 .75000E+00 .81747E+00 .28460E+00 .45854E+00 .86715E-02 .34510E-01 .47363E-01 .79209E-01 .18397E+00 .11966E-01  
 .80000E+00 .79853E+00 .27183E+00 .43870E+00 .61596E-01 .31344E-01 .42338E-01 .11396E+00 .12174E+00 .10733E-01  
 .85000E+00 .77774E+00 .25868E+00 .41622E+00 .12082E+00 .27076E-01 .35554E-01 .15658E+00 .54464E-01 .95840E-02  
 .90000E+00 .75491E+00 .24406E+00 .38960E+00 .18633E+00 .22129E-01 .27599E-01 .20544E+00 .17526E-01 .84726E-02  
 THETA= .15708E+01

R  
 .55000E+00 .93665E+00 .59349E-13 .58240E+00 .15250E+00 .88465E-15 .93467E-02 .14444E+00 .34549E+00 .31391E-14  
 .60000E+00 .94239E+00 .53280E-13 .53699E+00 .10300E+00 .39934E-14 .36538E-01 .85210E-01 .31890E+00 .26531E-14  
 .65000E+00 .93419E+00 .49375E-13 .50732E+00 .61520E-01 .52710E-14 .47734F-01 .67344E-01 .27892E+00 .23137E-14  
 .70000E+00 .91932E+00 .46629E-13 .48518F+00 .19057E-01 .55905E-14 .50334E-01 .74402E-01 .22959E+00 .20547E-14  
 .75000E+00 .90094E+00 .44446E-13 .46561E+00 .28131E-01 .53894E-14 .48094E-01 .97565E-01 .17304E+00 .18404E-14  
 .80000E+00 .88031E+00 .42451E-13 .44547E+00 .81493F-01 .48950E-14 .42991E-01 .13188E-01 .11046E+00 .16507E-14  
 .85000E+00 .85768E+00 .40398F-13 .42264E+00 .14147E+00 .42285E-14 .36102E-01 .17448E+00 .42522E-01 .14740E-14  
 .90000E+00 .83288E+00 .38115E-13 .39561E+00 .20806E+00 .34558E-14 .28025E-01 .22359E+00 .30370E-01 .13031E-14  
 THETA= .17453E+01

R  
 .55000E+00 .85068E+00 .38003E+00 .57355E+00 .16994E+00 .56647E-02 .92047E-02 .11305E+00 .36337E+00 .20410E-01  
 .60000E+00 .85561E+00 .34117E+00 .52883E+00 .12193E+00 .2571E-01 .35983E-01 .60195E-01 .33279E+00 .17251E-01  
 .65000E+00 .84798E+00 .31616E+00 .49611F+00 .80759E-01 .37352E-01 .47009E-01 .45938E-01 .29081E+00 .15044E-01  
 .70000E+00 .83432E+00 .29858E+00 .47780E+00 .38348E-01 .35798E-01 .49570E-01 .55004E-01 .24064E+00 .13360E-01  
 .75000E+00 .81747E+00 .28460E+00 .45854E+00 .86715E-02 .34510E-01 .47363E-01 .79209E-01 .18397E+00 .11966E-01  
 .80000E+00 .79853E+00 .27183E+00 .43870E+00 .61596E-01 .31344E-01 .42338E-01 .11396E+00 .12174E+00 .10733E-01  
 .85000E+00 .77774E+00 .25868E+00 .41622E+00 .12082E+00 .27076E-01 .35554E-01 .15658E+00 .54464E-01 .95840E-02  
 .90000E+00 .75491E+00 .24406E+00 .38960E+00 .18633E+00 .22129E-01 .27599E-01 .20544E+00 .17526E-01 .84726E-02  
 THETA= .19199E+01



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R	USAP	VHAR	MBAR	SIRR	SIRT	SIRF	SITI	SIFF	SITF
.55000E+00	.60315E+00	-.71422E+00	.54728E+00	.22017E+00	-.10646E-01	.87831E-02	-.22627E-01	.41485E+00	-.40201E-01
.60000E+00	.60574E+00	-.64119E+00	.50460E+00	.17642E+00	-.48057E-01	.34335E-01	.11831E-01	.37277E+00	-.33977E-01
.65000E+00	.59975E+00	-.59419E+00	.47672E+00	.13616E+00	-.63433E-01	.44856E-01	.15700E-01	.32504E+00	-.29631E-01
.70000E+00	.58957E+00	-.56115E+00	.45592E+00	.93892E-01	-.67278E-01	.47299E-01	.85057E-03	.27246E+00	-.26313E-01
.75000E+00	.57710E+00	-.53487E+00	.43753E+00	.47359E-01	-.64857E-01	.45193E-01	-.26355E-01	.21544E+00	-.23569E-01
.80000E+00	.56305E+00	-.51087E+00	.41861E+00	-.43060E-02	-.58907E-01	.40398E-01	-.62347E-01	.15420E+00	-.21140E-01
.85000E+00	.54755E+00	-.48615E+00	.39715E+00	-.61351E-01	-.50886E-01	.33925E-01	-.10504E+00	.88849E-01	-.18877E-01
.90000E+00	.53043E+00	-.45868E+00	.37175E+00	-.12376E+00	-.41588E-01	.26335E-01	-.15318E+00	.19456E-01	-.16688E-01

FEE= .87266E+00

THETA= 0.

UBAR	VRAR	WBAR	SIRR	SIPT	SIRF	SITT	SIFF	SITF
.55000E+00	-.19144E+01	0.	.73100E+00	0.	0.	.93847E+00	.89702E+00	.11754E+00
.60000E+00	-.19355F+01	0.	.73061E+00	0.	0.	.77933E+00	.74363E+00	.99343E-01
.65000E+00	-.19249E+01	0.	.69955E+00	0.	0.	.67133E+00	.64257E+00	.86635E-01
.70000E+00	-.18996E+01	0.	.65879E+00	0.	0.	.59604E+00	.56891E+00	.76935E-01
.75000E+00	-.18675E+01	0.	.61720E+00	0.	0.	.53548E+00	.51118E+00	.68910E-01
.80000E+00	-.18318E+01	0.	.57835E+00	0.	0.	.48436E+00	.46256E+00	.61809E-01
.85000E+00	-.17935E+01	0.	.54343E+00	0.	C.	.43855E+00	.41909E+00	.55192E-01
.90000E+00	-.17527E+01	0.	.51258E+00	0.	0.	.39557E+00	.37836E+00	.48792E-01

THETA= .17453E+00

UBAR	VRAR	WBAR	SIRR	SIPT	SIRF	SITT	SIFF	SITF
.55000E+00	-.18215E+01	.10113E+00	.71372E+00	.62284E-02	.16230E-02	.90525E+00	.87857E+00	.11575E+00
.60000E+00	-.18415E+01	.93247E-01	.71175E+00	.27774E-01	.63448E-02	.75321E+00	.73036E+00	.97833E-01
.65000E+00	-.18313E+01	.88095E-01	.68041E+00	.36631E-01	.82890E-02	.65100E+00	.63089E+00	.85318E-01
.70000E+00	-.18071E+01	.84250E-01	.63967E+00	.38833E-01	.87405E-02	.57627E+00	.55830E+00	.75766E-01
.75000E+00	-.17765E+01	.80852E-01	.59802E+00	.37410E-01	.83514E-02	.51703E+00	.50089E+00	.67863E-01
.80000E+00	-.17425E+01	.77355E-01	.55883E+00	.33937E-01	.74653E-02	.46660E+00	.45211E+00	.60870E-01
.85000E+00	-.17062E+01	.73391E-01	.52325E+00	.29253E-01	.62691E-02	.42106E+00	.40814E+00	.54353E-01
.90000E+00	-.16673E+01	.68697E-01	.49142E+00	.23819E-01	.48664E-02	.37805E+00	.36667E+00	.48050E-01

THETA= .34907E+00

UBAR	VRAR	WBAR	SIRR	SIPT	SIRF	SITT	SIFF	SITF
.55000E+00	-.15539E+01	.19919E+00	.66399E+00	.11705E-01	.31968E-02	.80958E+00	.82544E+00	.11045E+00
.60000E+00	-.15708E+01	.18366E+00	.65744E+00	.52199E-01	.12497E-01	.67781E+00	.69004E+00	.93352E-01
.65000E+00	-.15617E+01	.17351E+00	.62527E+00	.68843E-01	.16326E-01	.59729E+00	.59724E+00	.81410E-01
.70000E+00	-.15409E+01	.16594E+00	.58463E+00	.72983E-01	.17215E-01	.51933E+00	.52776E+00	.72295E-01
.75000E+00	-.15146E+01	.15925E+00	.54277E+00	.70308E-01	.16449E-01	.46392E+00	.47128E+00	.64754E-01
.80000E+00	-.14856E+01	.15236E+00	.50262E+00	.63780E-01	.14704E-01	.41546E+00	.42201E+00	.58082E-01
.85000E+00	-.14546E+01	.14455E+00	.46514E+00	.54978E-01	.12348E-01	.37067E+00	.37659E+00	.51863E-01
.90000E+00	-.14217E+01	.13531E+00	.43047E+00	.44765E-01	.95850E-02	.32760E+00	.33299E+00	.45849E-01

THETA= .52360E+00

UBAR	VRAR	WBAR	SIRR	SIPT	SIRF	SITT	SIFF	SITF
.55000E+00	-.11440E+01	.29120E+00	.58779E+00	.15771E-01	.46734E-02	.66300E+00	.74404E+00	.10179E+00
.60000E+00	-.11560E+01	.26849E+00	.57424E+00	.70327E-01	.18269E-01	.56229E+00	.62828E+00	.86033E-01
.65000E+00	-.11488E+01	.25366E+00	.54080E+00	.92752E-01	.23867E-01	.48968E+00	.54570E+00	.75028E-01
.70000E+00	-.11330E+01	.24259E+00	.50029E+00	.98329E-01	.25167E-01	.43211E+00	.48097E+00	.66628E-01
.75000E+00	-.11133E+01	.23280E+00	.45813E+00	.94726E-01	.24047E-01	.38255E+00	.42591E+00	.59678E-01
.80000E+00	-.10918E+01	.22274E+00	.41650E+00	.85930E-01	.21496E-01	.33711E+00	.37590E+00	.53528E-01
.85000E+00	-.10692E+01	.21132E+00	.37612E+00	.74072E-01	.18051E-01	.29348E+00	.32827E+00	.47798E-01
.90000E+00	-.10454E+01	.19780E+00	.33709E+00	.60311E-01	.14012E-01	.25030E+00	.28140E+00	.42255E-01

THETA= .69813E+00

UBAR	VRAR	WBAR	SIRR	SIPT	SIRF	SITT	SIFF	SITF
.55000E+00	-.64125E+00	.11954E+01	.49421E+00	.17934E-01	.6080E-02	.48320E+00	.64419E+00	.90040E-01
.60000E+00	-.64724E+00	.10756E+01	.47217E+00	.79973E-01	.23486E-01	.42058E+00	.55252E+00	.76101E-01
.65000E+00	-.64232E+00	.99844E+00	.43718E+00	.10547E+00	.30683E-01	.36795E+00	.48247E+00	.66366E-01
.70000E+00	-.63266E+00	.94398E+00	.39684E+00	.11182E+00	.32354E-01	.32511E+00	.42358E+00	.58936E-01
.75000E+00	-.62112E+00	.90033E+00	.35431E+00	.10772E+00	.30914E-01	.28274E+00	.37025E+00	.52788E-01
.80000E+00	-.60890E+00	.86005E+00	.31086E+00	.97716E-01	.27634E-01	.24100E+00	.31933E+00	.47349E-01
.85000E+00	-.59643E+00	.81822E+00	.26692E+00	.84232E-01	.23206E-01	.19880E+00	.26899E+00	.42279E-01
.90000E+00	-.58371E+00	.77144E+00	.22254E+00	.68583E-01	.19014E-01	.15549E+00	.21812E+00	.37377E-01

THETA= .87266E+00

UBAR	VRAR	WBAR	SIRR	SIPT	SIRF	SITT	SIFF	SITF
.55000E+00	-.10619E+00	.11954F+01	.39484E+00	.17934E-01	.71600E-02	.29187E+00	.53793E+00	.75553E-01
.60000E+00	-.10582E+00	.10756E+01	.36355E+00	.79973E-01	.27990E-01	.26978E+00	.47189E+00	.63856E-01
.65000E+00	-.10329E+00	.99844E+00	.32691E+00	.10547E+00	.36567E-01	.24253E+00	.41518E+00	.55688E-01



R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITI	SIFF	SITF
.55000E+00	.80649E+00	-.78023E+00	.54728E+00	.22517E+00	-.11705E-01	.87831E-02	-.34507E-01	.35668E+00	-.40201E-01
.60000E+00	.81771E+00	-.70205E+00	.50460E+00	.17828E+00	-.52159E-01	.14335E-01	.12557E-01	.33436E+00	-.33977E-01
.65000E+00	.81613E+00	-.65169E+00	.47672E+00	.13882E+00	-.68843E-01	.44856E-01	.25187E-01	.30040E+00	-.29631E-01
.70000E+00	.80802E+00	-.61614E+00	.45592E+00	.98960E-01	-.72983E-01	.47299E-01	.17012E-01	.25831E+00	-.26313E-01
.75000E+00	.79617E+00	-.58765E+00	.43753E+00	.55359E-01	-.70308E-01	.45193E-01	-.46645E-02	.20999E+00	-.23569E-01
.80000E+00	.78169E+00	-.56136E+00	.41861E+00	.66854E-02	-.63780E-01	.40398E-01	-.35747E-01	.15645E+00	-.21140E-01
.85000E+00	.76487E+00	-.53406E+00	.39715E+00	-.47511E-01	-.54978E-01	.33925E-01	-.73847E-01	.98303E-01	-.18877E-01
.90000E+00	.74556E+00	-.50352E+00	.37175E+00	-.10729E+00	-.44765E-01	.26335E-01	-.11752E+00	.35895E-01	-.16688E-01

FEE= .10472E+01

THETA= 0.

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.1914E+01	0.	0.	.73100E+00	0.	0.	-.97742E+00	-.85807E+00	-.10336E+00
.60000E+00	-.19355E+01	0.	0.	.73061E+00	0.	0.	-.81231E+00	-.71144E+00	-.87360E-01
.65000E+00	-.19249E+01	0.	0.	.69955E+00	0.	0.	-.70184E+00	-.61386E+00	-.76185E-01
.70000E+00	-.18996E+01	0.	0.	.65879E+00	0.	0.	-.62153E+00	-.54341E+00	-.67655E-01
.75000E+00	-.18675E+01	0.	0.	.61720E+00	0.	0.	-.55832E+00	-.48834E+00	-.60599E-01
.80000E+00	-.18318E+01	0.	0.	.57835E+00	0.	0.	-.50484E+00	-.44208E+00	-.54354E-01
.85000E+00	-.17935E+01	0.	0.	.54343E+00	0.	0.	-.45684E+00	-.40080E+00	-.48535E-01
.90000E+00	-.17527E+01	0.	0.	.51258E+00	0.	0.	-.41174E+00	-.36219E+00	-.42907E-01

THETA= .17453E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.18149E+01	.44816E+00	.88935E-01	.71388E+00	.67580E-02	.14273E-02	.94248E+00	-.83908E+00	-.10179E+00
.60000E+00	-.18347E+01	.40398E+00	.82000E-01	.71181E+00	.29845E-01	.55795E-02	.78502E+00	-.69733E+00	-.86033E-01
.65000E+00	-.18243E+01	.37551E+00	.77470E-01	.68049E+00	.39336E-01	.72892E-02	.67903E+00	-.60237E+00	-.75028E-01
.70000E+00	-.18001E+01	.35533E+00	.74088E-01	.63984E+00	.41686E-01	.76862E-02	.60141E+00	-.53322E+00	-.66628E-01
.75000E+00	-.17695E+01	.33907E+00	.71100E-01	.59827E+00	.40136E-01	.73441E-02	.53979E+00	-.47866E+00	-.59678E-01
.80000E+00	-.17355E+01	.32394E+00	.68025E-01	.55918E+00	.36373E-01	.65649E-02	.48724E+00	-.43240E+00	-.53528E-01
.85000E+00	-.16992E+01	.30812E+00	.64539E-01	.52369E+00	.31299E-01	.55129E-02	.43972E+00	-.39077E+00	-.47798E-01
.90000E+00	-.16604E+01	.29034E+00	.60411E-01	.49194E+00	.25407E-01	.42795E-02	.39481E+00	-.35158E+00	-.42255E-01

THETA= .34907E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.15286E+01	.84226E+00	.17517E+00	.66461E+00	.12701E-01	.28112E-02	.84189E+00	-.78440E+00	-.97129E-01
.60000E+00	-.15444E+01	.75924E+00	.16151E+00	.65767E+00	.56090E-01	.10990E-01	.70646E+00	-.65670E+00	-.82092E-01
.65000E+00	-.15348E+01	.70572E+00	.15259E+00	.62560E+00	.73927E-01	.14357E-01	.61338E+00	-.56927E+00	-.71591E-01
.70000E+00	-.15137E+01	.66781E+00	.14592E+00	.58526E+00	.78344E-01	.15139E-01	.54346E+00	-.50388E+00	-.63575E-01
.75000E+00	-.14873E+01	.63724E+00	.14004E+00	.54377E+00	.75431E-01	.14645E-01	.48644E+00	-.45079E+00	-.56944E-01
.80000E+00	-.14583E+01	.60980E+00	.13398E+00	.50399E+00	.68359E-01	.12930E-01	.43654E+00	-.40452E+00	-.51076E-01
.85000E+00	-.14276E+01	.57907E+00	.12712E+00	.46687E+00	.58823E-01	.10858E-01	.39042E+00	-.36190E+00	-.45608E-01
.90000E+00	-.13949E+01	.54566E+00	.11899E+00	.43252E+00	.47749E-01	.84289E-02	.34606E+00	-.32101E+00	-.40319E-01

THETA= .52360E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.10899E+01	.11348E+01	.25608E+00	.58911E+00	.17112E-01	.41097E-02	.68777E+00	-.70064E+00	-.89514E-01
.60000E+00	-.10996E+01	.10229E+01	.23611E+00	.57473E+00	.75570E-01	.16066E-01	.58608E+00	-.59446E+00	-.75656E-01
.65000E+00	-.10913E+01	.95081E+00	.22306E+00	.54151E+00	.99602E-01	.20988E-01	.51279E+00	-.51856E+00	-.65978E-01
.70000E+00	-.10749E+01	.89974E+00	.21333E+00	.50164E+00	.10555E+00	.22132E-01	.45468E+00	-.45893E+00	-.58591E-01
.75000E+00	-.10551E+01	.85855E+00	.20472E+00	.46026E+00	.10163E+00	.21146E-01	.40470E+00	-.40808E+00	-.52480E-01
.80000E+00	-.10337E+01	.82024E+00	.19587E+00	.41943E+00	.92099E-01	.18903E-01	.36181E+00	-.36181E+00	-.47072E-01
.85000E+00	-.10114E+01	.78018E+00	.18583E+00	.37980E+00	.79253E-01	.15874E-01	.31489E+00	-.31767E+00	-.42033E-01
.90000E+00	-.98813E+00	.73516E+00	.17395E+00	.34147E+00	.64333E-01	.12322E-01	.27138E+00	-.27419E+00	-.37158E-01

THETA= .69813E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.55184E+00	.12904E+01	.32921E+00	.49651E+00	.19459E-01	.52833E-02	.49871E+00	-.59788E+00	-.79180E-01
.60000E+00	-.55404E+00	.11632E+01	.30354E+00	.47299E+00	.85935E-01	.20654E-01	.43842E+00	-.51811E+00	-.66922E-01
.65000E+00	-.54717E+00	.10812E+01	.28677E+00	.43836E+00	.11326E+00	.26982E-01	.38940E+00	-.45636E+00	-.58361E-01
.70000E+00	-.53661E+00	.10231E+01	.27425E+00	.39907E+00	.12003E+00	.28452E-01	.34578E+00	-.40379E+00	-.51827E-01
.75000E+00	-.52479E+00	.97630E+00	.26319E+00	.35783E+00	.11557E+00	.27185E-01	.30443E+00	-.35570E+00	-.46421E-01
.80000E+00	-.51277E+00	.93274E+00	.25181E+00	.31569E+00	.10473E+00	.24301E-01	.26359E+00	-.30942E+00	-.41638E-01
.85000E+00	-.50087E+00	.88719E+00	.23890E+00	.27301E+00	.90123E-01	.20407E-01	.22224E+00	-.26342E+00	-.37180E-01
.90000E+00	-.48912E+00	.83600E+00	.22362E+00	.22978E+00	.73156E-01	.15841E-01	.17977E+00	-.21674E+00	-.32868E-01

THETA= .87266E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.20800E-01	.12904E+01	.39233E+00	.39796E+00	.19459E-01	.62964E-02	.29751E+00	-.48853E+00	-.66440E-01
.60000E+00	-.26559E-01	.11632E+01	.36174E+00	.36471E+00	.85935E-01	.24614E-01	.28128E+00	-.43686E+00	-.56154E-01
.65000E+00	-.31834E-01	.10812E+01	.34175E+00	.32858E+00	.11326E+00	.32156E-01	.25808E+00	-.39016E+00	-.48971E-01



70000E+00 .36214E-01 .10221E+01 .32684E+00 .28991E+00 .12003E+00 .33908E-01 .22988F+00 .34511E+00 .43488E-01  
75000E+00 .39497E-01 .97630E+00 .31366E+00 .24882E+00 .11557E+00 .32398E-01 .19773E+00 .29995E+00 .38952E-01  
80000E+00 .41578E-01 .93274E+00 .30009E+00 .20531E+00 .10473E+00 .28961E-01 .16220E+00 .25367E+00 .34938E-01  
85000E+00 .42398E-01 .88719F+00 .28471E+00 .15935E+00 .90123E-01 .24320E-01 .12365E+00 .20568E+00 .31198E-01  
90000E+00 .41915E-01 .83600E+00 .26650E+00 .11093E+00 .73156E-01 .18879E-01 .82280E-01 .15561E+00 .27580E-01  
THETA= .10472E+01

UBAR  
55000E+00 .55891E+00 .11348E+01 .44354E+00 .30535E+00 .17112E-01 .71182E-02 .10845E+00 .38577E+00 .51681E-01  
60000E+00 .57214E+00 .10229E+01 .40895E+00 .26297E+00 .75570E-01 .27827E-01 .13362E+00 .36051E+00 .43680E-01  
65000E+00 .57592E+00 .95081F+00 .38636E+00 .22543E+00 .99602E-01 .36353E-01 .13469E+00 .32795E+00 .38093E-01  
70000E+00 .57449E+00 .89974E+00 .36949E+00 .18734E+00 .10555E+00 .38333E-01 .12098E+00 .28997E+00 .33828E-01  
75000E+00 .56976E+00 .85855E+00 .35459E+00 .14638E+00 .10163E+00 .36627E-01 .97457E-01 .24757E+00 .30299E-01  
80000E+00 .56249E+00 .82024E+00 .33926E+00 .10158E+00 .92099E-01 .32741E-01 .66920E-01 .20128E+00 .27177E-01  
85000E+00 .55291E+00 .78018E+00 .32187E+00 .52557E-01 .79253E-01 .27494E-01 .30996E-01 .15142E+00 .24267E-01  
90000E+00 .54092E+00 .73516E+00 .30128F+00 .76070E-03 .64333E-01 .21343E-01 .93308E-02 .98170E-01 .21453E-01  
THETA= .12217E+01

UBAR  
55000E+00 .99758E+00 .84226E+00 .48127E+00 .22986E+00 .12701E-01 .77237E-02 .45670E-01 .30200E+00 .35352E-01  
60000E+00 .10169E+01 .75924E+00 .44374E+00 .18003E+00 .56090E-01 .30194E-01 .13240E-01 .29827E+00 .29879E-01  
65000E+00 .10195E+01 .70572E+00 .41922E+00 .14133E+00 .73927E-01 .39455E-01 .34102E-01 .27724E+00 .26057E-01  
70000E+00 .10133E+01 .66781E+00 .40093E+00 .10372E+00 .78344E-01 .41594E-01 .32199E-01 .24502E+00 .23140E-01  
75000E+00 .10020E+01 .63724E+00 .38476E+00 .62877E-01 .75431E-01 .39742E-01 .15718E-01 .20486E+00 .20726E-01  
80000E+00 .98715E+00 .60880E+00 .36812E+00 .17014E-01 .68359E-01 .35526E-01 .10752E-01 .15857E+00 .18590E-01  
85000E+00 .96908E+00 .57907E+00 .34925E+00 .34506E-01 .58823E-01 .29833E-01 .44534E-01 .10719E+00 .16600E-01  
90000E+00 .94772E+00 .54566E+00 .3261E+00 .91509E-01 .47749E-01 .23158E-01 .84013E-01 .51342E-01 .14675E-01  
THETA= .13963E+01

UBAR  
55000E+00 .12839E+01 .44816E+00 .50437E+00 .18058E+00 .67580E-02 .80945E-02 .14627E+00 .24733E+00 .17949E-01  
60000E+00 .13072E+01 .40398E+00 .46504E+00 .12589E+00 .29845E-01 .31643E-01 .65330E-01 .25765E+00 .15170E-01  
65000E+00 .13090E+01 .37551E+00 .43935E+00 .86445E-01 .39336E-01 .41339E-01 .31554E-01 .24414E+00 .13229E-01  
70000E+00 .12997E+01 .35533E+00 .42017E+00 .49145E-01 .41686E-01 .43591E-01 .25748E-01 .21568E+00 .11748E-01  
75000E+00 .12842E+01 .33907E+00 .40323E+00 .83727E-02 .40136E-01 .41650E-01 .37633E-01 .17699E+00 .10523E-01  
80000E+00 .12643E+01 .32394F+00 .38579E+00 .38180E-01 .36373E-01 .37231E-01 .61448E-01 .13069E+00 .94385E-02  
85000E+00 .12407E+01 .30812E+00 .36602E+00 .91332E-01 .31299E-01 .31265E-01 .93832E-01 .78317E-01 .84280E-02  
90000E+00 .12132E+01 .29034E+00 .34261E+00 .15124E+00 .25407E-01 .24270E-01 .13276E+00 .20777E-01 .74507E-02  
THETA= .15708E+01

UBAR  
55000E+00 .13833E+01 .60989E-13 .51216F+00 .16347E+00 .10554E-14 .82194E-02 .18120E+00 .22834E+00 .27605E-14  
60000E+00 .14080E+01 .63090E-13 .47222E+00 .10709E+00 .46609E-14 .32131E-01 .92617E-01 .24354E+00 .23331E-14  
65000E+00 .14095E+01 .58643E-13 .44613E+00 .67383E-01 .61431E-14 .41977E-01 .54356E-01 .23265E+00 .20346E-14  
70000E+00 .13992E+01 .55493E-13 .42666E+00 .30191E-01 .65100E-14 .44263E-01 .45873E-01 .20549E+00 .18068E-14  
75000E+00 .13822E+01 .52952E-13 .40945E+00 .10557E-01 .62680E-14 .42293E-01 .56162E-01 .16731E+00 .16184E-14  
80000E+00 .13606E+01 .50589E-13 .39174E+00 .57349E-01 .56803E-14 .37806E-01 .79055E-01 .12101E+00 .14516E-14  
85000E+00 .13351E+01 .48119E-13 .37166E+00 .11107E+00 .48880E-14 .31748E-01 .11095E+00 .68290E-01 .12962E-14  
90000E+00 .13054E+01 .45342F-13 .34789E+00 .17188F+00 .39678E-14 .24645E-01 .14969E+00 .10162E-01 .11459E-14  
THETA= .17453E+01

UBAR  
55000E+00 .12839E+01 .44816E+00 .50437E+00 .18058E+00 .67580E-02 .80945E-02 .14627E+00 .24733E+00 .17949E-01  
60000E+00 .13072E+01 .40398E+00 .46504E+00 .12589E+00 .29845E-01 .31643E-01 .65330E-01 .25765E+00 .15170E-01  
65000E+00 .13090E+01 .37551E+00 .43935E+00 .86445E-01 .39336E-01 .41339E-01 .31554E-01 .24414E+00 .13229E-01  
70000E+00 .12997E+01 .35533E+00 .42017E+00 .49145E-01 .41686E-01 .43591E-01 .25748E-01 .21568E+00 .11748E-01  
75000E+00 .12842E+01 .33907E+00 .40323E+00 .83727E-02 .40136E-01 .41650E-01 .37633E-01 .17699E+00 .10523E-01  
80000E+00 .12643E+01 .32394E+00 .38579E+00 .38180E-01 .36373E-01 .37231E-01 .61448E-01 .13069E+00 .94385E-02  
85000E+00 .12407E+01 .30812E+00 .36602E+00 .91332E-01 .31299E-01 .31265E-01 .93832E-01 .78317E-01 .84280E-02  
90000E+00 .12132E+01 .29034E+00 .34261E+00 .15124E+00 .25407E-01 .24270E-01 .13276E+00 .20777E-01 .74507E-02  
THETA= .19199E+01



R	UBAR	VBAR	WBAR	SIRP	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	.99758E+00	-.84226E+00	.48127E+00	.22986E+00	-.12701E-01	.77237E-02	-.45670E-01	.30200E+00	-.35352E-01
.60000E+00	.10169F+01	-.75924E+00	.44374E+00	.18003E+00	-.56090E-01	.30194E-01	.13240E-01	.29827E+00	-.29879E-01
.65000E+00	.10195E+01	-.70572E+00	.41922E+00	.14133E+00	-.73927E-01	.39445E-01	.34102E-01	.27724E+00	-.26057E-01
.70000E+00	.10133E+01	-.66781E+00	.40093E+00	.10372E+00	-.78344E-01	.41594E-01	.32199E-01	.24502E+00	-.23140E-01
.75000E+00	.10020E+01	-.63724E+00	.38476E+00	.62877E-01	-.75431E-01	.39742E-01	.15718E-01	.20486E+00	-.20726E-01
.80000E+00	.98715E+00	-.60880E+00	.36812E+00	.17014E-01	-.68359E-01	.35526E-01	-.10752E-01	.15857E+00	-.18590E-01
.85000E+00	.96908E+00	-.57907E+00	.34925E+00	-.34506E-01	-.58823E-01	.29833E-01	-.44534E-01	.10719E+00	-.16600E-01
.90000E+00	.94772E+00	-.54566E+00	.32691E+00	-.91809E-01	-.47749E-01	.23158E-01	-.84013E-01	.51342E-01	-.14675E-01

FEE= .12217F+01  
THETA= 0.

R	URAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.19144E+01	0.	0.	.73100E+00	0.	0.	.10092E+01	.82632E+00	.76718E-01
.60000E+00	-.19355E+01	0.	0.	.73061E+00	0.	0.	.83915E+00	.68460E+00	.64841E-01
.65000E+00	-.19249E+01	0.	0.	.69955E+00	0.	0.	.72524E+00	.59046E+00	.56547E-01
.70000E+00	-.18996E+01	0.	0.	.65879E+00	0.	0.	.62322E+00	.52263E+00	.50216E-01
.75000E+00	-.18675E+01	0.	0.	.61720E+00	0.	0.	.57693E+00	.46973E+00	.44978E-01
.80000E+00	-.18318E+01	0.	0.	.57835E+00	0.	0.	.52154E+00	.42538E+00	.40343E-01
.85000E+00	-.17935E+01	0.	0.	.54343E+00	0.	0.	.47175E+00	.38589E+00	.36024E-01
.90000E+00	-.17527E+01	0.	0.	.51258E+00	0.	0.	.42492E+00	.34901E+00	.31846E-01

THETA= .17453E+00

R	URAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.18096E+01	.47506E+00	.66010E-01	.71401E+00	.71898E-02	.10594E-02	.97284E+00	.80689E+00	.75553E-01
.60000E+00	-.18291E+01	.42879E+00	.60863E-01	.71186E+00	.31533E-01	.41413E-02	.81096E+00	.67040E+00	.63856E-01
.65000E+00	-.18187E+01	.39894E+00	.57500E-01	.68056E+00	.41541E-01	.54102E-02	.70189E+00	.57912E+00	.55688E-01
.70000E+00	-.17944E+01	.37775E+00	.54990E-01	.63997E+00	.44011E-01	.57049E-02	.62191E+00	.51278E+00	.49453E-01
.75000E+00	-.17637E+01	.36058E+00	.52772E-01	.59848E+00	.42358E-01	.54510E-02	.55833E+00	.46054E+00	.44295E-01
.80000E+00	-.17298E+01	.34452E+00	.50490E-01	.55947E+00	.38359E-01	.48726E-02	.50406E+00	.41633E+00	.39730E-01
.85000E+00	-.16935E+01	.32764E+00	.47902E-01	.52406E+00	.32967E-01	.40918E-02	.45494E+00	.37662E+00	.35477E-01
.90000E+00	-.16548E+01	.30861E+00	.44838E-01	.49237E+00	.26702E-01	.31763E-02	.40847E+00	.33928E+00	.31363E-01

THETA= .34907E+00

R	URAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.15080E+01	.89283E+00	.13001E+00	.66511E+00	.13512E-01	.20865E-02	.86823E+00	.75095E+00	.72092E-01
.60000E+00	-.15229E+01	.80586E+00	.11988E+00	.65786E+00	.59262E-01	.81568E-02	.72981E+00	.62952E+00	.60931E-01
.65000E+00	-.15128E+01	.74977E+00	.11325E+00	.62588E+00	.78072E-01	.10656E-01	.63464E+00	.54647E+00	.53137E-01
.70000E+00	-.14915E+01	.70994E+00	.10831E+00	.58577E+00	.82714E-01	.11237E-01	.56313E+00	.48442E+00	.47187E-01
.75000E+00	-.14651E+01	.67766E+00	.10394E+00	.54458E+00	.79606E-01	.10736E-01	.50479E+00	.43409E+00	.42265E-01
.80000E+00	-.14361E+01	.64748E+00	.99446E-01	.50510E+00	.72091E-01	.95972E-02	.45373E+00	.39027E+00	.37910E-01
.85000E+00	-.14055E+01	.61577E+00	.94349E-01	.46827E+00	.61958E-01	.80593E-02	.40652E+00	.34993E+00	.33851E-01
.90000E+00	-.13731E+01	.58001E+00	.88315E-01	.43419E+00	.50183E-01	.62562E-02	.36112E+00	.31125E+00	.29926E-01

THETA= .52360F+00

R	URAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.10458E+01	.12029E+01	.19007E+00	.59020E+00	.18205E-01	.30503E-02	.70795E+00	.66526E+00	.66440E-01
.60000E+00	-.10536E+01	.10857E+01	.17525E+00	.57514E+00	.79844E-01	.11924E-01	.60548E+00	.56689E+00	.56154E-01
.65000E+00	-.10443E+01	.10102E+01	.16556E+00	.54209E+00	.10519E+00	.15578E-01	.53162E+00	.49644E+00	.48971E-01
.70000E+00	-.10275E+01	.95649E+00	.15834E+00	.50274E+00	.11144E+00	.16427E-01	.47509E+00	.44097E+00	.43488E-01
.75000E+00	-.10075E+01	.91301E+00	.15195E+00	.46200E+00	.10725E+00	.15695E-01	.42275E+00	.39356E+00	.38952E-01
.80000E+00	-.98626E+00	.87235E+00	.14534E+00	.42181E+00	.97128E-01	.14030E-01	.37661E+00	.35033E+00	.34938E-01
.85000E+00	-.96425E+00	.82962E+00	.13793E+00	.38281E+00	.83476E-01	.11782E-01	.33235E+00	.30903E+00	.31198E-01
.90000E+00	-.94147E+00	.78144E+00	.12911E+00	.34504E+00	.67611E-01	.91459E-02	.28856E+00	.26830E+00	.27580E-01

THETA= .69813E+00

R	URAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.47895E+00	.13679E+01	.24435E+00	.49830E+00	.20702E-01	.39214E-02	.51134E+00	.56013E+00	.58770E-01
.60000E+00	-.47806E+00	.12347E+01	.22529E+00	.47366E+00	.90795E-01	.15330E-01	.45296E+00	.49007E+00	.49671E-01
.65000E+00	-.46961E+00	.11487E+01	.21285E+00	.43931E+00	.11961E+00	.20027E-01	.40525E+00	.43507E+00	.43317E-01
.70000E+00	-.45831E+00	.10877E+01	.20356E+00	.40088E+00	.12672E+00	.21118E-01	.36263E+00	.38766E+00	.38467E-01
.75000E+00	-.44627E+00	.10382E+01	.19535E+00	.36069E+00	.12156E+00	.20178E-01	.32211E+00	.34384E+00	.34455E-01
.80000E+00	-.43440E+00	.99200E+00	.18690E+00	.31963E+00	.11045E+00	.18037E-01	.28201E+00	.30135E+00	.30905E-01
.85000E+00	-.42298E+00	.94341E+00	.17732E+00	.27797E+00	.94925E-01	.15147E-01	.24136E+00	.25887E+00	.27596E-01
.90000E+00	-.41201E+00	.88862E+00	.16598E+00	.23569E+00	.76884E-01	.11758E-01	.19957E+00	.21562E+00	.24356E-01

THETA= .87266F+00

R	URAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.12432E+01	.13679E+01	.29120E+00	.40050E+00	.20702E-01	.46734E-02	.30212E+00	.44826E+00	.49314E-01
.60000E+00	-.13447E+00	.12347E+01	.26849E+00	.36566E+00	.90795E-01	.18269E-01	.29065E+00	.40831E+00	.41679E-01
.65000E+00	-.14199E+00	.11487E+01	.25366E+00	.32994E+00	.11961E+00	.23867E-01	.27076E+00	.36976E+00	.36348E-01

.70000E+00	-14742E+00	.10877E+01	-24259E+00	-29249E+00	.12672E+00	-25167E-01	.24508E+00	.33094E+00	.32278E-01
.75000E+00	.15102E+00	.10382E+01	-23280E+00	-25289E+00	.12196E+00	-24047E-01	.21501E+00	.29093E+00	.28911E-01
.80000E+00	.15289E+00	.99200E+00	-22274E+00	-21090E+00	-11045F+00	-21496E-01	.18134E+00	.20549E+00	.25932E-01
.85000E+00	.15303E+00	.94341E+00	-21132E+00	-16640F+00	.94925E-01	.18051E-01	.14453E+00	.20549E+00	.23156E-01
.90000E+00	.15144E+00	.88862E+00	.19780E+00	.11931E+00	.76884E-01	.14012E-01	.10485E+00	.15356E+00	.20471E-01
THETA=	.10472E+01								
	R	UBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	.69121E+00	.12029E+01	.32921E+00	.30860E+00	.18205E-01	.52833E-02	.10551E+00	.34314E+00	.38359E-01
.60000E+00	.71006E+00	.10857E+01	.30354E+00	.26418E+00	.79844E-01	.20654E-01	.13813E+00	.33148E+00	.32421E-01
.65000E+00	.71671E+00	.10102E+01	.28677E+00	.22716E+00	.10519E+00	.26982E-01	.14439E+00	.30840E+00	.28273E-01
.70000E+00	.71663E+00	.95649E+00	.27425E+00	.19064E+00	.11144E+00	.28452E-01	.13463E+00	.27764E+00	.25108E-01
.75000E+00	.71229E+00	.91301E+00	.26319E+00	.15159E+00	.10725E+00	.27185E-01	.11437E+00	.22461E+00	.22489E-01
.80000E+00	.70475E+00	.87235E+00	.25181E+00	.10873E+00	.97128E-01	.24301E-01	.86742E-01	.20023E+00	.20172E-01
.85000E+00	.69430E+00	.82962E+00	.23890E+00	.61562E-01	.83476E-01	.20407E-01	.53538E-01	.15322E+00	.18012E-01
.90000E+00	.68090E+00	.78144E+00	.22362E+00	.99577E-02	.67611E-01	.15841E-01	.15856E-01	.10688E+00	.15923E-01
THETA=	.12217E+01								
	R	UBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	.11533E+01	.89283E+00	.35721E+00	.23368E+00	.13512E-01	.57327E-02	-.54770E-01	.25744E+00	.26239E-01
.60000E+00	.11793E+01	.80586E+00	.32936E+00	.18145E+00	.59262E-01	.22410E-01	.13796E-01	.26885E+00	.22177E-01
.65000E+00	.11852E+01	.74977E+00	.31116E+00	.14338E+00	.79072E-01	.29277E-01	.41369E-01	.25837E+00	.19340E-01
.70000E+00	.11806E+01	.70994E+00	.29758E+00	.10761E+00	.82714E-01	.30872E-01	.44580E-01	.23419E+00	.17175E-01
.75000E+00	.11698E+01	.67766E+00	.28558E+00	.69006E-01	.79606E-01	.29498E-01	.32334E-01	.20069E+00	.15383E-01
.80000E+00	.11546E+01	.64748E+00	.27233E+00	.25434E-01	.72091E-01	.26368E-01	.96249E-02	.16029E+00	.13798E-01
.85000E+00	.11356E+01	.61577E+00	.25922E+00	-.23904E-01	.61958E-01	.22143E-01	-.20638E-01	.11443E+00	.12321E-01
.90000E+00	.11125E+01	.58001E+00	.24264E+00	-.79189E-01	.50183E-01	.17189E-01	-.56697E-01	.63935E-01	.10892E-01
THETA=	.13963E+01								
	R	UBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	.14550E+01	.47506E+00	.37436E+00	.18479E+00	.71898E-02	.6080E-02	-.15938E+00	.20150E+00	.13322E-01
.60000E+00	.14855E+01	.42879E+00	.34517E+00	.12746E+00	.31533E-01	.23486E-01	-.67358E-01	.22797E+00	.11260E-01
.65000E+00	.14910E+01	.39894E+00	.32610E+00	.88690E-01	.41541E-01	.3083E-01	-.25873E-01	.22572E+00	.98192E-02
.70000E+00	.14835E+01	.37775E+00	.31186E+00	.53410E-01	.44011E-01	.32354E-01	-.14194E-01	.20583E+00	.87199E-02
.75000E+00	.14685E+01	.36058E+00	.29429E+00	.15104E-01	.42358E-01	.30914E-01	-.21214E-01	.17423E+00	.78005E-02
.80000E+00	.14483E+01	.34522E+00	.28634E+00	-.28932E-01	.38359E-01	.27634E-01	-.40710E-01	.13423E+00	.70055E-02
.85000E+00	.14236E+01	.32764E+00	.27167E+00	-.79687E-01	.32967E-01	.23206E-01	-.69052E-01	.87737E-01	.62555E-02
.90000E+00	.13942E+01	.30861E+00	.25429E+00	-.13738E+00	.26702E-01	.18014E-01	-.10405E+00	.35905E-01	.55301E-02
THETA=	.15708E+01								
	R	UBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	.15597E+01	.74191E-13	.38014E+00	.16780E+00	.11228E-14	.61006E-02	-.19572E+00	.18208E+00	.20489E-14
.60000E+00	.15919E+01	.66964E-13	.35049E+00	.10870E+00	.49245E-14	.23849E-01	-.95542E-01	.21378E+00	.17317E-14
.65000E+00	.15972E+01	.62303E-13	.33113E+00	.69698E-01	.6875E-14	.31156E-01	-.49226E-01	.21438E+00	.15102E-14
.70000E+00	.15887E+01	.56993E-13	.31668E+00	.34588E-01	.68732E-14	.32853E-01	-.34605E-01	.19598E+00	.13411E-14
.75000E+00	.15722E+01	.56311E-13	.30390E+00	-.36160E-02	.66150E-14	.31391E-01	-.39811E-01	.16504E+00	.12012E-14
.80000E+00	.15503E+01	.53803E-13	.29076E+00	-.47814E-01	.59905E-14	.28060E-01	-.58191E-01	.12518E+00	.10774E-14
.85000E+00	.15236E+01	.51168E-13	.27586E+00	-.99061E-01	.51485E-14	.23564E-01	-.85867E-01	.78467E-01	.96208E-15
.90000E+00	.14921E+01	.48196E-13	.25821E+00	-.15758E+00	.41700E-14	.18292E-01	-.12050E+00	.26170E-01	.85051E-15
THETA=	.17453E+01								
	R	UBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	.14550E+01	.47506E+00	.37436E+00	.18479E+00	.71898E-02	.6080E-02	-.15938E+00	.20150E+00	.13322E-01
.60000E+00	.14855E+01	.42879E+00	.34517E+00	.12746E+00	.31533E-01	.23486E-01	-.67358E-01	.22797E+00	.11260E-01
.65000E+00	.14910E+01	.39894E+00	.32610E+00	.88690E-01	.41541E-01	.3083E-01	-.25873E-01	.22572E+00	.98192E-02
.70000E+00	.14835E+01	.37775E+00	.31186E+00	.53410E-01	.44011E-01	.32354E-01	-.14194E-01	.20583E+00	.87199E-02
.75000E+00	.14685E+01	.36058E+00	.29429E+00	.15104E-01	.42358E-01	.30914E-01	-.21214E-01	.17423E+00	.78005E-02
.80000E+00	.14483E+01	.34522E+00	.28634E+00	-.28932E-01	.38359E-01	.27634E-01	-.40710E-01	.13423E+00	.70055E-02
.85000E+00	.14236E+01	.32764E+00	.27167E+00	-.79687E-01	.32967E-01	.23206E-01	-.69052E-01	.87737E-01	.62555E-02
.90000E+00	.13942E+01	.30861E+00	.25429E+00	-.13738E+00	.26702E-01	.18014E-01	-.10405E+00	.35905E-01	.55301E-02
THETA=	.19199E+01								

R	U8AR	V8AR	W8AR	SIRR	SIR	SIT	SIRF	SITT	SIFF	SITF
.55000E+00	.11533E+01	-.89283E+00	.35721E+00	.23368E+00	-.13512E-01	.57327E-02	-.54770E-01	.25744E+00	-.26239E-01	
.60000E+00	.11793E+01	-.80586E+00	.32936E+00	.18145E+00	-.59262E-01	.22410E-01	.13796E-01	.26885E+00	-.22177E-01	
.65000E+00	.11852E+01	-.74977E+00	.31116E+00	.14338E+00	-.78072E-01	.29277E-01	.41369E-01	.25837E+00	-.19340E-01	
.70000E+00	.11806E+01	-.70994E+00	.29758E+00	.10761E+00	-.82714E-01	.30872E-01	.44580E-01	.23419E+00	-.17175E-01	
.75000E+00	.11698E+01	-.67766E+00	.28558E+00	.69006E-01	-.79606E-01	.29498E-01	.32334E-01	.20069E+00	-.15383E-01	
.80000E+00	.11546E+01	-.64748E+00	.27323E+00	.25434E-01	-.72091E-01	.26368E-01	.96249E-02	.16029E+00	-.13798E-01	
.85000E+00	.11356E+01	-.61577E+00	.25922E+00	-.23904E-01	-.61958E-01	.22143E-01	-.20638E-01	.11443E+00	-.12321E-01	
.90000E+00	.11125E+01	-.58001E+00	.24264E+00	-.79189E-01	-.50183E-01	.17189E-01	-.56697E-01	.63935E-01	-.10892E-01	

FEE= .13963E+01

THETA= 0.

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.19144E+01	0.	.73100E+00	0.	0.	.10299E+01	.80559E+00	.40821E-01
.60000E+00	-.19355E+01	0.	.73061E+00	0.	0.	.85667E+00	.66708E+00	.34501E-01
.65000E+00	-.19249E+01	0.	.69955E+00	0.	0.	.74052E+00	.57518E+00	.30088E-01
.70000E+00	-.18996E+01	0.	.65879E+00	0.	0.	.65588E+00	.50906E+00	.26719E-01
.75000E+00	-.18675E+01	0.	.61720E+00	0.	0.	.58908E+00	.45758E+00	.23932E-01
.80000E+00	-.18318E+01	0.	.57835E+00	0.	0.	.53244E+00	.41448E+00	.21466E-01
.85000E+00	-.17935E+01	0.	.54343E+00	0.	0.	.48149E+00	.37616E+00	.19168E-01
.90000E+00	-.17527E+01	0.	.51258E+00	0.	0.	.43352E+00	.34041E+00	.16945E-01

THETA= .17453E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.18061E+01	.35123E-01	.71410E+00	.74717E-02	.56368E-03	.99266E+00	.78588E+00	.40201E-01
.60000E+00	-.18255E+01	.32384E-01	.71189E+00	.32635E-01	.22035E-02	.82790E+00	.65283E+00	.33977E-01
.65000E+00	-.18150E+01	.30595E-01	.68061E+00	.42981E-01	.28787E-02	.71680E+00	.56394E+00	.29631E-01
.70000E+00	-.17907E+01	.29260E-01	.64005E+00	.45529E-01	.30355E-02	.63528E+00	.49943E+00	.26313E-01
.75000E+00	-.17600E+01	.28080E-01	.59862E+00	.43808E-01	.27004E-02	.57044E+00	.44871E+00	.23569E-01
.80000E+00	-.17261E+01	.26865E-01	.55966E+00	.39655E-01	.25927E-02	.51504E+00	.40584E+00	.21140E-01
.85000E+00	-.16898E+01	.25488E-01	.52429E+00	.34056E-01	.21772E-02	.46487E+00	.36738E+00	.18877E-01
.90000E+00	-.16511E+01	.23858E-01	.49266E+00	.27547E-01	.16901E-02	.41739E+00	.33125E+00	.16688E-01

THETA= .34907E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.14945E+01	.69179E-01	.66544E+00	.14042E-01	.11102E-02	.88542E+00	.72912E+00	.38359E-01
.60000E+00	-.15088E+01	.63785E-01	.65799E+00	.61333E-01	.43401E-02	.74506E+00	.61178E+00	.32421E-01
.65000E+00	-.14985E+01	.60261E-01	.62605E+00	.80777E-01	.56700E-02	.64853E+00	.53158E+00	.28273E-01
.70000E+00	-.14771E+01	.57630E-01	.58611E+00	.85566E-01	.59788E-02	.57597E+00	.47171E+00	.25108E-01
.75000E+00	-.14506E+01	.55306E-01	.54511E+00	.82332E-01	.57127E-02	.51676E+00	.42318E+00	.22489E-01
.80000E+00	-.14217E+01	.52914E-01	.50583E+00	.74528E-01	.51066E-02	.46494E+00	.38096E+00	.20172E-01
.85000E+00	-.13911E+01	.50202E-01	.46919E+00	.64004E-01	.42883E-02	.41703E+00	.34211E+00	.18012E-01
.90000E+00	-.13588E+01	.46991E-01	.43528E+00	.51771E-01	.33288E-02	.37094E+00	.30487E+00	.15923E-01

THETA= .52360E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.10171E+01	.10113E+00	.59090E+00	.18919E-01	.16230E-02	.72113E+00	.64216E+00	.35352E-01
.60000E+00	-.10236E+01	.93247E-01	.57540E+00	.82636E-01	.63448E-02	.61814E+00	.54890E+00	.29879E-01
.65000E+00	-.10137E+01	.88095E-01	.54247E+00	.10883E+00	.82890E-02	.54392E+00	.48200E+00	.26057E-01
.70000E+00	-.99658E+00	.84250E-01	.50346E+00	.11528E+00	.87405E-02	.48510E+00	.42924E+00	.23140E-01
.75000E+00	-.97653E+00	.80852E-01	.46313E+00	.11093E+00	.83514E-02	.43453E+00	.38407E+00	.20726E-01
.80000E+00	-.95531E+00	.77355E-01	.42337E+00	.10041E+00	.74653E-02	.38819E+00	.34284E+00	.18590E-01
.85000E+00	-.93349E+00	.73391E-01	.38477E+00	.86232E-01	.62691E-02	.34374E+00	.30340E+00	.16600E-01
.90000E+00	-.91101E+00	.68697E-01	.34737E+00	.69751E-01	.48664E-02	.29978E+00	.26446E+00	.14675E-01

THETA= .69813E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.43138E+00	.14185E+01	.49947E+00	.21514E-01	.20865E-02	.51959E+00	.53549E+00	.31271E-01
.60000E+00	-.42846E+00	.12813E+01	.47409E+00	.93968E-01	.41568E-02	.46245E+00	.47176E+00	.26430E-01
.65000E+00	-.41899E+00	.11928E+01	.43994E+00	.12376E+00	.10656E-01	.41560E+00	.42118E+00	.23049E-01
.70000E+00	-.40720E+00	.11298E+01	.40207E+00	.13110E+00	.11237E-01	.37363E+00	.37714E+00	.20468E-01
.75000E+00	-.39502E+00	.10787E+01	.36257E+00	.12614E+00	.10736E-01	.33365E+00	.33610E+00	.18333E-01
.80000E+00	-.38325E+00	.10307E+01	.32221E+00	.11418E+00	.95972E-02	.29403E+00	.29607E+00	.16444E-01
.85000E+00	-.37214E+00	.98010E+00	.28121E+00	.99439E-01	.80593E-02	.25383E+00	.25590E+00	.14684E-01
.90000E+00	-.36167E+00	.92297E+00	.23954E+00	.79317E-01	.62562E-02	.21249E+00	.21489E+00	.12981E-01

THETA= .87266E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.19189E+00	.14185E+01	.40216E+00	.21514E-01	.24866E-02	.30512E+00	.42198E+00	.26239E-01
.60000E+00	-.20491E+00	.12813E+01	.36628E+00	.93968E-01	.97203E-02	.29677E+00	.38967E+00	.22177E-01
.65000E+00	-.21389E+00	.11928E+01	.33083E+00	.12376E+00	.12699E-01	.27904E+00	.35645E+00	.19340E-01





R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	.12550E+01	-.92583E+00	.19007E+00	.23618E+00	-.14042E-01	.30503E-02	-.60710E-01	.22835E+00	-.13962E-01
.60000E+00	.12853E+01	-.83630E+00	.17525E+00	.18238E+00	-.61333E-01	.11924E-01	.14159E-01	.24965E+00	-.11800E-01
.65000E+00	.12934E+01	-.77852E+00	.16556E+00	.14471E+00	-.80777E-01	.15578E-01	.46112E-01	.24605E+00	-.10291E-01
.70000E+00	.12899E+01	-.73743E+00	.15834E+00	.11014E+00	-.85566E-01	.16427E-01	.52660E-01	.22712E+00	-.91385E-02
.75000E+00	.12794E+01	-.70405E+00	.15195E+00	.73006E-01	-.82332E-01	.15695E-01	.43180E-01	.19796E+00	-.81853E-02
.80000E+00	.12640E+01	-.67272E+00	.14538E+00	.30929E-01	-.74528E-01	.14030E-01	.22925E-01	.16142E+00	-.73418E-02
.85000E+00	.12442E+01	-.63972E+00	.13793E+00	-.16984E-01	-.64004E-01	.11782E-01	-.50404E-02	.11916E+00	-.65558E-02
.90000E+00	.12201E+01	-.60243E+00	.12911E+00	-.70953E-01	-.51771E-01	.51459E-02	-.38868E-01	.72155E-01	-.57956E-02

FEE= -15708E+Q1

THETA= 0.

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.19144E+01	0.	0.	.73100E+00	0.	0.	.10371E+01	.79839E+00	.63750E-14
.60000E+00	-.19355E+01	0.	0.	.73061E+00	0.	0.	.86275E+00	.66100E+00	.53881E-14
.65000E+00	-.19249E+01	0.	0.	.69955E+00	0.	0.	.74582E+00	.56988E+00	.46988E-14
.70000E+00	-.18996E+01	0.	0.	.65879E+00	0.	0.	.66060E+00	.50435E+00	.41727E-14
.75000E+00	-.18675E+01	0.	0.	.61720E+00	0.	0.	.59330E+00	.45336E+00	.37375E-14
.80000E+00	-.18318E+01	0.	0.	.57835E+00	0.	0.	.53623E+00	.41070E+00	.33524E-14
.85000E+00	-.17935E+01	0.	0.	.54343E+00	0.	0.	.48487E+00	.37278E+00	.29935E-14
.90000E+00	-.17527E+01	0.	0.	.51258E+00	0.	0.	.43651E+00	.33742E+00	.26463E-14

THETA= .17453E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.18049E+01	.49873E+00	.54852E-14	.71413E+00	.75696E-02	.88029E-16	.99954E+00	.77858E+00	.62781E-14
.60000E+00	-.18243E+01	.45061E+00	.50574E-14	.71190E+00	.33017E-01	.34413E-15	.83378E+00	.64672E+00	.53062E-14
.65000E+00	-.18137E+01	.41955E+00	.47780E-14	.68062E+00	.43480E-01	.44957E-15	.72198E+00	.55867E+00	.46274E-14
.70000E+00	-.17894E+01	.39746E+00	.45695E-14	.64008E+00	.46056E-01	.47406E-15	.63993E+00	.49480E+00	.41093E-14
.75000E+00	-.17587E+01	.37949E+00	.43852E-14	.59867E+00	.44311E-01	.45295E-15	.57465E+00	.44460E+00	.36807E-14
.80000E+00	-.17248E+01	.36261E+00	.41955E-14	.55972E+00	.40106E-01	.40490E-15	.51885E+00	.40220E+00	.33014E-14
.85000E+00	-.16885E+01	.34481E+00	.39805E-14	.52437E+00	.34434E-01	.34002E-15	.46832E+00	.36417E+00	.29480E-14
.90000E+00	-.16499E+01	.32469E+00	.37259E-14	.49275E+00	.27840E-01	.26394E-15	.42049E+00	.32846E+00	.26061E-14

THETA= .34907E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.14898E+01	.93730E+00	.10804E-13	.66556E+00	.14226E-01	.17338E-15	.89135E+00	.72154E+00	.59905E-14
.60000E+00	-.15040E+01	.84686E+00	.99612E-14	.65803E+00	.62052E-01	.67779E-15	.75033E+00	.60562E+00	.50631E-14
.65000E+00	-.14935E+01	.78850E+00	.94109E-14	.62611E+00	.81716E-01	.88548E-15	.65335E+00	.52641E+00	.44154E-14
.70000E+00	-.14720E+01	.74698E+00	.90001E-14	.58622E+00	.86557E-01	.93371E-15	.58043E+00	.46730E+00	.39211E-14
.75000E+00	-.14455E+01	.71321E+00	.86371E-14	.54529E+00	.83278E-01	.89215E-15	.52092E+00	.41940E+00	.35121E-14
.80000E+00	-.14166E+01	.68149E+00	.82636E-14	.50608E+00	.75374E-01	.79749E-15	.46884E+00	.37773E+00	.31502E-14
.85000E+00	-.13861E+01	.64804E+00	.78401E-14	.46951E+00	.64714E-01	.66970E-15	.42068E+00	.33940E+00	.28129E-14
.90000E+00	-.13539E+01	.61021E+00	.73386E-14	.43566E+00	.52322E-01	.51986E-15	.37435E+00	.30266E+00	.24867E-14

THETA= .52360E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.10074E+01	.12628E+01	.15794E-13	.59115E+00	.19167E-01	.25347E-15	.72570E+00	.63414E+00	.55209E-14
.60000E+00	-.10132E+01	.11410E+01	.14562E-13	.57549E+00	.83603E-01	.99087E-15	.62253E+00	.54265E+00	.46662E-14
.65000E+00	-.10031E+01	.10623E+01	.13758E-13	.54260E+00	.11010E+00	.12945E-14	.54819E+00	.47699E+00	.40693E-14
.70000E+00	-.98584E+00	.10064E+01	.13157E-13	.50371E+00	.11662E+00	.13650E-14	.48927E+00	.42517E+00	.36137E-14
.75000E+00	-.96576E+00	.96091E+00	.12627E-13	.46352E+00	.11220E+00	.13042E-14	.43862E+00	.38078E+00	.32368E-14
.80000E+00	-.94456E+00	.91817E+00	.12081E-13	.42391E+00	.10159E+00	.11659E-14	.39221E+00	.34023E+00	.29032E-14
.85000E+00	-.92280E+00	.87310E+00	.11461E-13	.38545E+00	.87189E-01	.97904E-15	.34770E+00	.30144E+00	.25924E-14
.90000E+00	-.90044E+00	.82214E+00	.10728E-13	.34818E+00	.70494E-01	.75999E-15	.30367E+00	.26313E+00	.22918E-14

THETA= .69813E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.41486E+00	.14360E+01	.20304E-13	.49987E+00	.21796E-01	.32585E-15	.52246E+00	.52694E+00	.48835E-14
.60000E+00	-.41124E+00	.12975E+01	.18721E-13	.47424E+00	.95070E-01	.12738E-14	.46574E+00	.46540E+00	.41275E-14
.65000E+00	-.40141E+00	.12081E+01	.17687E-13	.44015E+00	.12520E+00	.16842E-14	.41919E+00	.41635E+00	.35995E-14
.70000E+00	-.38945E+00	.11444E+01	.16915E-13	.40248E+00	.13261E+00	.17548E-14	.37745E+00	.37348E+00	.31965E-14
.75000E+00	-.37722E+00	.10927E+01	.16237E-13	.36322E+00	.12735E+00	.16767E-14	.33766E+00	.33341E+00	.28631E-14
.80000E+00	-.36548E+00	.10441E+01	.15530E-13	.32310E+00	.11548E+00	.14988E-14	.29821E+00	.29424E+00	.25681E-14
.85000E+00	-.35448E+00	.99285E+00	.14735E-13	.28233E+00	.99148E-01	.12586E-14	.25817E+00	.25487E+00	.22931E-14
.90000E+00	-.34419E+00	.93490E+00	.13792E-13	.24088E+00	.80163E-01	.97702E-15	.21697E+00	.21464E+00	.20272E-14

THETA= .87266E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.21536E+00	.14360E+01	.24198E-13	.40274E+00	.21796E-01	.38834E-15	.30616E+00	.41285E+00	.40978E-14
.60000E+00	-.22937E+00	.12975E+01	.22311E-13	.36650E+00	.95070E-01	.15181E-14	.29889E+00	.38320E+00	.34634E-14
.65000E+00	-.23886E+00	.12081E+01	.21078E-13	.33113E+00	.12520E+00	.19833E-14	.28192E+00	.35183E+00	.30203E-14

70000E+00	-24522E+00	-11444E+01	20158E-13	29476E+00	-13261E+00	20913E-14	-31848E+00	-26822E-14
75000E+00	-24909E+00	10927E+01	19345E-13	25647E+00	-12759E+00	19982E-14	-28300E+00	-24024E-14
80000E+00	-25076E+00	10441E+01	18508E-13	21582E+00	-11548E+00	17862E-14	-24530E+00	-21548E-14
85000E+00	-25032E+00	99285E+00	17560E-13	17260E+00	-99148E-01	15000E-14	-20532E+00	-19242E-14
90000E+00	-24775E+00	93490E+00	16437E-13	12669E+00	-80163E-01	11644E-14	-16303E+00	-17010E-14
THETA=	10472E+01							
55000E+00	-80756E+00	12628E+01	23356E-13	31146E+00	-19167E-01	43902E-15	-30564E+00	-31875E-14
60000E+00	-83134E+00	11410E+01	25223E-13	26525E+00	-83603E-01	17162E-14	-30595E+00	-26940E-14
65000E+00	-84052E+00	10623E+01	23829E-13	22869E+00	-11010E+00	22421E-14	-29120E+00	-23494E-14
70000E+00	-84162E+00	10064E+01	22789E-13	19354E+00	-11662E+00	14662E-14	-26679E+00	-20864E-14
75000E+00	-83764E+00	96091E+00	21870E-13	15617E+00	-11220E+00	22590E-14	-23563E+00	-18687E-14
80000E+00	-82985E+00	91817E+00	20924E-13	11502E+00	-10155E+00	20193E-14	-19931E+00	-16762E-14
85000E+00	-81865E+00	87310E+00	19852E-13	69481E-01	-87189E-01	16957E-14	-15876E+00	-14967E-14
90000E+00	-80399E+00	82214E+00	18582E-13	19383E-01	-70494E-01	13163E-14	-11454E+00	-13232E-14
THETA=	12217E+01							
55000E+00	-12903E+01	93730E+00	29683E-13	23705E+00	-14226E-01	47637E-15	-21824E+00	-21804E-14
60000E+00	-13221E+01	84686E+00	27368E-13	18271E+00	-62052E-01	18622E-14	-24298E+00	-18428E-14
65000E+00	-13310E+01	78850E+00	25856E-13	14518E+00	-81716E-01	24328E-14	-24177E+00	-16071E-14
70000E+00	-13278E+01	74698E+00	24728E-13	11102E+00	-86557E-01	25654E-14	-22466E+00	-14272E-14
75000E+00	-13174E+01	71321E+00	23730E-13	74395E-01	-83278E-01	24512E-14	-19701E+00	-12783E-14
80000E+00	-13019E+01	68149E+00	22704E-13	32838E-01	-75374E-01	21911E-14	-16181E+00	-11466E-14
85000E+00	-12820E+01	64804E+00	21540E-13	-14580E-01	-64714E-01	18400E-14	-12080E+00	-10238E-14
90000E+00	-12574E+01	61021E+00	20163E-13	-68092E-01	-52322E-01	14283E-14	-75009E-01	-90509E-15
THETA=	13963E+01							
55000E+00	-16054E+01	49873E+00	31108E-13	18848E+00	-75696E-02	49924E-15	-16120E+00	-11070E-14
60000E+00	-16424E+01	45061E+00	28682E-13	12883E+00	-33017E-01	49924E-15	-20188E+00	-93563E-15
65000E+00	-16511E+01	41955E+00	27098E-13	90665E-01	-43480E-01	25496E-14	-20951E+00	-81594E-15
70000E+00	-16451E+01	39746E+00	25915E-13	57160E-01	-46056E-01	26885E-14	-19716E+00	-72459E-15
75000E+00	-16306E+01	37949E+00	24870E-13	21023E-01	-44311E-01	25688E-14	-17814E+00	-64901E-15
80000E+00	-16100E+01	36261E+00	23794E-13	-20800E-01	-40106E-01	22963E-14	-13734E+00	-58213E-15
85000E+00	-15844E+01	34481E+00	22575E-13	-69447E-01	-34434E-01	19283E-14	-96021E-01	-51581E-15
90000E+00	-15534E+01	32469E+00	21131E-13	-12519E+00	-27840E-01	14969E-14	-49207E-01	-45953E-15
THETA=	15708E+01							
55000E+00	-17149E+01	77886E-13	31588E-13	17161E+00	-11821E-14	50694E-15	-14139E+00	-17025E-27
60000E+00	-17336E+01	70371E-13	29125E-13	11012E+00	-51563E-14	19817E-14	-18760E+00	-14390E-27
65000E+00	-17623E+01	65521E-13	27516E-13	71734E-01	-67903E-14	25890E-14	-19830E+00	-12549E-27
70000E+00	-17553E+01	62071E-13	26315E-13	38454E-01	-71925E-14	27300E-14	-18761E+00	-11144E-27
75000E+00	-17393E+01	59265E-13	25253E-13	24874E-02	-69201E-14	26085E-14	-16305E+00	-99816E-28
80000E+00	-17171E+01	56629E-13	24161E-13	39428E-01	-62633E-14	23317E-14	-12884E+00	-89530E-28
85000E+00	-16894E+01	53849E-13	22923E-13	-88502E-01	-53775E-14	19581E-14	-87416E-01	-79945E-28
90000E+00	-16562E+01	50706E-13	21457E-13	-14502E+00	-43478E-14	15200E-14	-40246E-01	-70674E-28
THETA=	17453E+01							
55000E+00	-16054E+01	77886E-13	31108E-13	18848E+00	-75696E-02	49924E-15	-16120E+00	-11070E-14
60000E+00	-16424E+01	45061E+00	28682E-13	12883E+00	-33017E-01	49924E-15	-20188E+00	-93563E-15
65000E+00	-16511E+01	41955E+00	27098E-13	90665E-01	-43480E-01	25496E-14	-20951E+00	-81594E-15
70000E+00	-16451E+01	39746E+00	25915E-13	57160E-01	-46056E-01	26885E-14	-19716E+00	-72459E-15
75000E+00	-16306E+01	37949E+00	24870E-13	21023E-01	-44311E-01	25688E-14	-17814E+00	-64901E-15
80000E+00	-16100E+01	36261E+00	23794E-13	-20800E-01	-40106E-01	22963E-14	-13734E+00	-58213E-15
85000E+00	-15844E+01	34481E+00	22575E-13	-69447E-01	-34434E-01	19283E-14	-96021E-01	-51981E-15
90000E+00	-15534E+01	32469E+00	21131E-13	-12519E+00	-27840E-01	14969E-14	-49207E-01	-45953E-15
THETA=	19199E+01							

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	.12903E+01	-.93730E+00	.29683E-13	.23705E+00	-.14226E-01	.47637E-15	-.62773E-01	.21824E+00	-.21804E-14
.60000E+00	.13221E+01	-.84686E+00	.27368E-13	.18271E+00	-.62052E-01	.18622E-14	.14285E-01	.24298E+00	-.18428E-14
.65000E+00	.13310E+01	-.78850E+00	.25856E-13	.14518E+00	-.81716E-01	.24328E-14	.47760E-01	.24177E+00	-.16071E-14
.70000E+00	.13278E+01	-.74698E+00	.24728E-13	.11102E+00	-.86557E-01	.25654E-14	.55467E-01	.22466E+00	-.14272E-14
.75000E+00	.13174E+01	-.71321E+00	.23730E-13	.74395E-01	-.83278E-01	.2112E-14	.46946E-01	.19701E+00	-.12783E-14
.80000E+00	.13019E+01	-.68149E+00	.22704E-13	.32838E-01	-.75374E-01	.2111E-14	.27544E-01	.16181E+00	-.11466E-14
.85000E+00	.12820E+01	-.64804E+00	.21540E-13	-.14580E-01	-.64714E-01	.18400E-14	.37643E-03	.12080E+00	-.10238E-14
.90000E+00	.12574E+01	-.61021E+00	.20163E-13	-.68092E-01	-.52322E-01	.14283E-14	-.32676E-01	.75009E-01	-.90509E-15

FEE= .17453E+01

THETA= 0.

UBAR	VRAP	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.19144E+01	0.	.73100E+00	0.	0.	.10299E+01	.80559E+00	-.40821E-01
.60000E+00	-.19355E+01	0.	.73061E+00	0.	0.	.95667E+00	.66709E+00	-.34501E-01
.65000E+00	-.19249E+01	0.	.69955E+00	0.	0.	.74052E+00	.57518E+00	-.30088E-01
.70000E+00	-.18996E+01	0.	.65879E+00	0.	0.	.58908E+00	.50906E+00	-.26719E-01
.75000E+00	-.18675E+01	0.	.61720E+00	0.	0.	.58908E+00	.45758E+00	-.23932E-01
.80000E+00	-.18318E+01	0.	.57835E+00	0.	0.	.53244E+00	.41448E+00	-.21466E-01
.85000E+00	-.17935E+01	0.	.54343E+00	0.	0.	.48149E+00	.37616E+00	-.19168E-01
.90000E+00	-.17527E+01	0.	.51258E+00	0.	0.	.43352E+00	.34041E+00	-.16945E-01

THETA= .17453E+00

UBAR	VRAP	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.18061E+01	.49263E+00	.71410E+00	.74717E-02	-.56368E-03	.99266E+00	.78588E+00	-.40201E-01
.60000E+00	-.18255E+01	.44498E+00	.71189E+00	.32635E-01	-.22035E-02	.82790E+00	.65283E+00	-.33977E-01
.65000E+00	-.18150E+01	.41424E+00	.68061E+00	.42981E-01	-.28787E-02	.71680E+00	.56394E+00	-.29631E-01
.70000E+00	-.17907E+01	.39238E+00	.64005E+00	.45529E-01	-.30355E-02	.63528E+00	.49943E+00	-.26313E-01
.75000E+00	-.17600E+01	.37462E+00	.59862E+00	.43808E-01	-.29004E-02	.57044E+00	.44871E+00	-.23569E-01
.80000E+00	-.17261E+01	.35795E+00	.55966E+00	.39655E-01	-.25927E-02	.51504E+00	.40584E+00	-.21140E-01
.85000E+00	-.16898E+01	.34039E+00	.52429E+00	.34056E-01	-.21772E-02	.46487E+00	.36738E+00	-.18877E-01
.90000E+00	-.16511E+01	.32054E+00	.49266E+00	.27547E-01	-.16901E-02	.41739E+00	.33125E+00	-.16688E-01

THETA= .34907E+00

UBAR	VRAP	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.15948E+01	.92583E+00	.66544E+00	.14042E-01	-.11102E-02	.88542E+00	.72912E+00	-.38359E-01
.60000E+00	-.15088E+01	.83630E+00	.65799E+00	.61333E-01	-.43401E-02	.74506E+00	.61178E+00	-.32421E-01
.65000E+00	-.14985E+01	.77852E+00	.62605E+00	.80777E-01	-.56700E-02	.64853E+00	.53158E+00	-.28273E-01
.70000E+00	-.14771E+01	.73743E+00	.58611E+00	.85566E-01	-.59788E-02	.57597E+00	.47171E+00	-.25108E-01
.75000E+00	-.14506E+01	.70405E+00	.54511E+00	.82332E-01	-.57127E-02	.51676E+00	.42318E+00	-.22489E-01
.80000E+00	-.14217E+01	.67272E+00	.50583E+00	.74528E-01	-.51066E-02	.46494E+00	.38096E+00	-.20172E-01
.85000E+00	-.13911E+01	.63972E+00	.46919E+00	.64004E-01	-.42883E-02	.41703E+00	.34211E+00	-.18012E-01
.90000E+00	-.13588E+01	.60243E+00	.43528E+00	.51771E-01	-.33288E-02	.37094E+00	.30487E+00	-.15923E-01

THETA= .52360E+00

UBAR	VRAP	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.10171E+01	.12474E+01	.59090E+00	.18919E-01	-.16230E-02	.72113E+00	.64216E+00	-.35352E-01
.60000E+00	-.10236E+01	.11267E+01	.57540E+00	.82634E-01	-.63449E-02	.61814E+00	.54890E+00	-.29879E-01
.65000E+00	-.10137E+01	.10489E+01	.54247E+00	.10883E-01	-.82890E-02	.54392E+00	.48200E+00	-.26057E-01
.70000E+00	-.99658E+00	.99354E+00	.50346E+00	.11528E+00	-.87403E-02	.48510E+00	.42924E+00	-.23140E-01
.75000E+00	-.97653E+00	.94856E+00	.46313E+00	.11093E+00	-.83514E-02	.43453E+00	.38407E+00	-.20726E-01
.80000E+00	-.95531E+00	.90636E+00	.42337E+00	.10041E+00	-.74653E-02	.38819E+00	.34284E+00	-.18590E-01
.85000E+00	-.93349E+00	.86189E+00	.38477E+00	.86232E-01	-.62691E-02	.34374E+00	.30340E+00	-.16600E-01
.90000E+00	-.91101E+00	.81165E+00	.34737E+00	.69751E-01	-.48664E-02	.29978E+00	.26446E+00	-.14675E-01

THETA= .69813E+00

UBAR	VRAP	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.43138E+00	.14185E+01	.49947E+00	.21514E-01	-.20865E-02	.51959E+00	.53549E+00	-.31271E-01
.60000E+00	-.42846E+00	.12813E+01	.47409E+00	.93968E-01	-.81568E-02	.46245E+00	.47176E+00	-.26430E-01
.65000E+00	-.41899E+00	.11928E+01	.43994E+00	.12376E-01	-.10656E-01	.41560E+00	.42118E+00	-.23049E-01
.70000E+00	-.40720E+00	.11298E+01	.40207E+00	.13110E+00	-.11237E-01	.37363E+00	.37714E+00	-.20468E-01
.75000E+00	-.39502E+00	.10787E+01	.36257E+00	.12614E+00	-.10736E-01	.33365E+00	.33610E+00	-.18333E-01
.80000E+00	-.38325E+00	.10307E+01	.32221E+00	.11418E+00	-.95972E-02	.29403E+00	.29607E+00	-.16444E-01
.85000E+00	-.37214E+00	.98010E+00	.28121E+00	.98060E-01	-.80593E-02	.25383E+00	.25590E+00	-.14684E-01
.90000E+00	-.36167E+00	.92297E+00	.23954E+00	.79317E-01	-.62562E-02	.21249E+00	.21489E+00	-.12981E-01

THETA= .87266E+00

UBAR	VRAP	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	-.19189E+00	.14185E+01	.40216E+00	.21514E-01	-.24866E-02	.30512E+00	.42198E+00	-.26239E-01
.60000E+00	-.20491E+00	.12813E+01	.36628E+00	.93968E-01	-.97208E-02	.29677E+00	.38967E+00	-.22177E-01
.65000E+00	-.21389E+00	.11928E+01	.33083E+00	.12376E+00	-.12699E-01	.27904E+00	.35645E+00	-.19340E-01

70000E+00	-22001E+00	-11234F+01	-29419E+00	-13110E+00	-13391F-01	-25500E+00	-32169F+00	-17175E-01
75000E+00	-22381F+00	-10787F+01	-25558F+00	-12614E+00	-12795E-01	-22633E+00	-28504E+00	-15383E-01
80000E+00	-22553E+00	-10307F+01	-21455E+00	-11414E+00	-11438E-01	-19383E+00	-24631E+00	-13798E-01
85000E+00	-22524F+00	-98010F+00	-17100E+00	-93060F-01	-96048E-02	-15816E+00	-20536E+00	-12321E-01
90000E+00	-22292F+00	-92297E+00	-12479E+00	-79317E-01	-74558F-02	-11959E+00	-16214E+00	-10892E-01
THETA = .10472E+01								
55000E+00	-77757E+00	-12474F+01	-31072E+00	-18919E-01	-28112E-02	-10359F+00	-31531E+00	-20410F-01
60000E+00	-80008E+00	-11267E+01	-26497E+00	-82634E-01	-10990E-01	-14108E+00	-31253E+00	-17251E-01
65000E+00	-80861E+00	-10489E+01	-22833E+00	-10883F+00	-14357E-01	-15072E+00	-29836E+00	-15044E-01
70000E+00	-80404E+00	-94354E+00	-19279E+00	-11528F+00	-15139F-01	-14353E+00	-26959E+00	-13300F-01
75000E+00	-80533F+00	-94856F+00	-15499F+00	-11093E+00	-14465E-01	-17542E+00	-23707E+00	-11966E-01
80000E+00	-79760E+00	-90636E+00	-11340E+00	-10041F+00	-12930E-01	-95640E-01	-19954E+00	-10733E-01
85000E+00	-78659E+00	-86199E+00	-67439E-01	-86232E-01	-10458E-01	-63252E-01	-15787E+00	-55840E-02
90000E+00	-77226E+00	-81165E+00	-16954E-01	-69751E-01	-84289E-02	-32295E-01	-11257E+00	-84726E-02
THETA = .12217E+01								
55000E+00	-12550E+01	-92583E+00	-23618E+00	-14042E-01	-3503E-02	-60710E-01	-22835E+00	-13962E-01
60000E+00	-12853E+01	-83630F+00	-18238E+00	-61333E-01	-11924E-01	-14159E-01	-24965E+00	-11800E-01
65000E+00	-12934E+01	-77852E+00	-14471E+00	-80777E-01	-15578E-01	-46112E-01	-24605E+00	-10291E-01
70000E+00	-12399E+01	-73743E+00	-11014E+00	-85566E-01	-16427E-01	-52660E-01	-22712E+00	-91385E-02
75000E+00	-12794E+01	-70405E+00	-73006E-01	-82332E-01	-15695E-01	-43180E-01	-19796E+00	-81953E-02
80000E+00	-12640E+01	-67272E+00	-30929E-01	-74528F-01	-14030E-01	-22925E-01	-16142E+00	-73418E-02
85000E+00	-12442E+01	-63972F+00	-16984E-01	-64004E-01	-11782E-01	-50404E-02	-11916E+00	-65558E-02
90000E+00	-12201E+01	-60243E+00	-70953E-01	-51771E-01	-91459E-02	-38868E-01	-72155E-01	-57956E-02
THETA = .13963E+01								
55000E+00	-15667E+01	-49263E+00	-18753E+00	-74717E-02	-31968F-02	-16795E+00	-17179E+00	-70885E-02
60000E+00	-16020F+01	-44494E+00	-12948E+00	-32635E-01	-12497E-01	-68681E-01	-20861E+00	-59911E-02
65000E+00	-16099E+01	-41424E+00	-90156F-01	-42981E-01	-16326F-01	-22166E-01	-21369E+00	-52247E-02
70000E+00	-16035F+01	-39238F+00	-56193F-01	-45529F-01	-17215E-01	-66521E-02	-19939E+00	-46397E-02
75000E+00	-15888F+01	-37462E+00	-19497E-01	-43808E-01	-16449E-01	-10497E-01	-17243E+00	-41558E-02
80000E+00	-15683E+01	-35795E+00	-22396F-01	-3955E-01	-14704E-01	-27174E-01	-13654E+00	-37275E-02
85000E+00	-15429F+01	-34039E+00	-72087F-01	-3456F-01	-12348E-01	-52879F-01	-93885E-01	-33285E-02
90000E+00	-15124E+01	-32054E+00	-12833E+00	-27547E-01	-95850F-02	-85316F-01	-45773E-01	-29425E-02
THETA = .15708E+01								
55000E+00	-16749E+01	-76933E-13	-17063E+00	-11608E-14	-32461E-02	-20519E+00	-15188E+00	-10902E-14
60000E+00	-17119F+01	-69493E-13	-18649E+00	-50965E-14	-12690E-01	-97452F-01	-19435E+00	-92141E-15
65000E+00	-17198E+01	-64692E-13	-17619E+00	-67123E-14	-16578E-01	-45878E-01	-20245E+00	-80354E-15
70000E+00	-17124E+01	-61278E-13	-16850E+00	-71102E-14	-17481E-01	-27251E-01	-18977E+00	-71358E-15
75000E+00	-16963F+01	-58504E-13	-16170E+00	-68414E-14	-16703E-01	-29139E-01	-16357E+00	-63915E-15
80000E+00	-16741F+01	-55901E-13	-15471E+00	-61930E-14	-14931E-01	-44373E-01	-12790E+00	-57329E-15
85000E+00	-16466E+01	-53158E-13	-14678E+00	-53185E-14	-12538E-01	-69493E-01	-85109E-01	-51191E-15
90000E+00	-16139E+01	-50359E-13	-13739E+00	-43020E-14	-57329E-02	-10145E+00	-36618E-01	-45255E-15
THETA = .17453F+01								
55000E+00	-15667F+01	-49263E+00	-18753E+00	-74717E-02	-31968E-02	-16795E+00	-17159E+00	-70885E-02
60000E+00	-16020E+01	-44499E+00	-18366E+00	-32635E-01	-12497E-01	-68681E-01	-20861E+00	-59911E-02
65000E+00	-16099F+01	-41424F+00	-17351E+00	-42981E-01	-16326E-01	-22166E-01	-21369E+00	-52247E-02
70000E+00	-16035E+01	-39238F+00	-16594F+00	-45529E-01	-17215F-01	-66521F-02	-19939E+00	-46397E-02
75000E+00	-15888E+01	-37462E+00	-15925E+00	-43808E-01	-16449F-01	-10497E-01	-17243E+00	-41558E-02
80000E+00	-15688E+01	-35795E+00	-15236E+00	-39655E-01	-14704E-01	-27174E-01	-13654E+00	-37275E-02
85000E+00	-15429F+01	-34039E+00	-14455F+00	-34056E-01	-12348E-01	-52879E-01	-93885E-01	-33285E-02
90000E+00	-15124E+01	-32054E+00	-13531E+00	-27547E-01	-95850E-02	-85316E-01	-45778E-01	-29425E-02
THETA = .19199F+01								



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R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.55000E+00	.12550E+01	-.92583E+00	-.19007E+00	.23618E+00	-.14042E-01	-.30503E-02	-.60710E-01	.22835E+00	.13962E-01
.60000E+00	.12853E+01	-.83630E+00	-.17525E+00	.18238E+00	-.61333E-01	-.11924E-01	.14159E-01	.24965E+00	.11800E-01
.65000E+00	.12934E+01	-.77852E+00	-.16556E+00	.14471E+00	-.80777E-01	-.15578E-01	.46112E-01	.24605E+00	.10291E-01
.70000E+00	.12899E+01	-.73743E+00	-.15834E+00	.11014E+00	-.85566E-01	-.16427E-01	.52660E-01	.22712E+00	.91385E-02
.75000E+00	.12794E+01	-.70405E+00	-.15195E+00	.73006E-01	-.82332E-01	-.15695E-01	.43180E-01	.19796E+00	.81853E-02
.80000E+00	.12640E+01	-.67272E+00	-.14538E+00	.30929E-01	-.74528E-01	-.14030E-01	.22925E-01	.16142E+00	.73418E-02
.85000E+00	.12442E+01	-.63972E+00	-.13793E+00	.16984E-01	-.64004E-01	-.11732E-01	.50404E-02	.11916E+00	.65558E-02
.90000E+00	.12201E+01	-.60243E+00	-.12911E+00	.70953E-01	-.51771E-01	-.91459E-02	.38868E-01	.72155E-01	.57956E-02

# Set II, Model III, — Upper Mantle

FEE= 0. (900)

THETA= 0. (900)

UBAR (U)	VBAR (V)	WBAR (W)	SIRP (S)	SIRT (T)	SIRF (F)	SITT (G)	SIFF (H)	SITE (I)
88000E+00	-17004E+01	0.	43525E+00	0.	0.	-14204E+01	49704E+03	0.
89000E+00	-16975E+01	0.	41117E+00	0.	0.	-15480E+01	29897E+03	0.
90000E+00	-16944E+01	0.	38367E+00	0.	0.	-16718E+01	10676E+03	0.
91000E+00	-16910E+01	0.	35321E+00	0.	0.	-17923E+01	80110E+03	0.
92000E+00	-16873E+01	0.	32018E+00	0.	0.	-19096E+01	26213E+03	0.
93000E+00	-16835E+01	0.	28497E+00	0.	0.	-20242E+01	43974E+03	0.
94000E+00	-16795E+01	0.	24788E+00	0.	0.	-21362E+01	61335E+03	0.
95000E+00	-16753E+01	0.	20920E+00	0.	0.	-22461E+01	78334E+03	0.
96000E+00	-16709E+01	0.	16919E+00	0.	0.	-23539E+01	95004E+03	0.
97000E+00	-16663E+01	0.	12808E+00	0.	0.	-24598E+01	11138E+03	0.
98000E+00	-16616E+01	0.	86069E+00	0.	0.	-25642E+01	12748E+03	0.
99000E+00	-16568E+01	0.	43337E+00	0.	0.	-26672E+01	14334E+03	0.
10000E+00	-16519E+01	0.	43952E+00	0.	0.	-27688E+01	15899E+03	0.

THETA= .17453E+00

UBAR	VBAR	WBAR	SIRP	SIRT	SIRF	SITT	SIFF	SITE
88000E+00	-16425E+01	0.	41636E+00	70693E-02	0.	-14373E+01	55725E+03	0.
89000E+00	-16357E+01	0.	39293E+00	11225E-01	0.	-15583E+01	36284E+03	0.
90000E+00	-16367E+01	0.	36618E+00	14163E-01	0.	-16757E+01	17419E+03	0.
91000E+00	-16334E+01	0.	33655E+00	15979E-01	0.	-17900E+01	92283E-02	0.
92000E+00	-16300E+01	0.	30444E+00	16758E-01	0.	-19013E+01	18789E+03	0.
93000E+00	-16263E+01	0.	27020E+00	16579E-01	0.	-20100E+01	36223E+03	0.
94000E+00	-16224E+01	0.	23414E+00	15512E-01	0.	-21163E+01	53265E+03	0.
95000E+00	-16184E+01	0.	19654E+00	13622E-01	0.	-22205E+01	69952E+03	0.
96000E+00	-16142E+01	0.	15764E+00	10969E-01	0.	-23228E+01	86316E+03	0.
97000E+00	-16098E+01	0.	11767E+00	76058E-02	0.	-24234E+01	10239E+03	0.
98000E+00	-16053E+01	0.	76815E-01	35823E-02	0.	-25224E+01	11820E+03	0.
99000E+00	-16007E+01	0.	35258E-01	10566E-02	0.	-26202E+01	13377E+03	0.
10000E+00	-15959E+01	0.	68478E-02	62699E-02	0.	-27167E+01	14913E+03	0.

THETA= .34907E+00

UBAR	VBAR	WBAR	SIRP	SIRT	SIRF	SITT	SIFF	SITE
88000E+00	-14757E+01	0.	36195E+00	13286E-01	0.	-14859E+01	73061E+03	0.
89000E+00	-14733E+01	0.	34039E+00	21096E-01	0.	-15840E+01	54678E+03	0.
90000E+00	-14705E+01	0.	31580E+00	26618E-01	0.	-16870E+01	36836E+03	0.
91000E+00	-14678E+01	0.	28860E+00	30031E-01	0.	-17834E+01	19487E+03	0.
92000E+00	-14648E+01	0.	25912E+00	31495E-01	0.	-18773E+01	25863E-01	0.
93000E+00	-14615E+01	0.	22769E+00	31158E-01	0.	-19690E+01	13907E+03	0.
94000E+00	-14582E+01	0.	19460E+00	29153E-01	0.	-20598E+01	30030E+03	0.
95000E+00	-14546E+01	0.	16009E+00	25601E-01	0.	-21468E+01	45817E+03	0.
96000E+00	-14509E+01	0.	12438E+00	20615E-01	0.	-22333E+01	61300E+03	0.
97000E+00	-14471E+01	0.	87685E-01	14294E-01	0.	-23183E+01	76507E+03	0.
98000E+00	-14431E+01	0.	50171E-01	67326E-02	0.	-24021E+01	91466E+03	0.
99000E+00	-14390E+01	0.	11999E-01	19858E-02	0.	-24848E+01	10620E+03	0.
10000E+00	-14349E+01	0.	26692E-01	11744E-01	0.	-25665E+01	12073E+03	0.

THETA= .52300E+00

UBAR	VBAR	WBAR	SIRP	SIRT	SIRF	SITT	SIFF	SITE
88000E+00	-12201E+01	0.	27860E+00	17900E-01	0.	-15604E+01	99622E+03	0.
89000E+00	-12183E+01	0.	25990E+00	28422E-01	0.	-16334E+01	82957E+03	0.
90000E+00	-12162E+01	0.	23863E+00	35863E-01	0.	-17043E+01	66583E+03	0.
91000E+00	-12140E+01	0.	21512E+00	40461E-01	0.	-17733E+01	50755E+03	0.
92000E+00	-12117E+01	0.	18968E+00	42433E-01	0.	-18406E+01	35335E+03	0.
93000E+00	-12091E+01	0.	16257E+00	41979E-01	0.	-19064E+01	20284E+03	0.
94000E+00	-12055E+01	0.	13402E+00	39277E-01	0.	-19703E+01	5695E-01	0.
95000E+00	-12037E+01	0.	10424E+00	34492E-01	0.	-20340E+01	88403E-01	0.

96000E+00	-120C8E+01	38462E+00	0.	73430E-01	-2774E-01	0.	-20962E+01	-22973E+00	0.
97000E+00	-11978E+01	37193E+00	0.	41750E-01	-19259E-01	0.	-21574E+01	-36855E+00	0.
98000E+00	-11946E+01	35921E+00	0.	93498E-02	90708E-02	0.	-22178E+01	-50511E+00	0.
99000E+00	-11914E+01	34642E+00	0.	-23638E-01	-26755E-02	0.	-22774E+01	-63962E+00	0.
10000E+00	-11881E+01	33358E+00	0.	-57094E-01	-15876E-01	0.	-23364E+01	-77228E+00	0.
THETA= .69813E+00									
88000E+00	-90657E+00	55396E+00	0.	17634E+00	20355E-01	0.	-16518E+01	13220E+01	0.
89000E+00	-90543E+00	53904E+00	0.	16116E+00	32321E-01	0.	-16891E+01	11742E+01	0.
90000E+00	-90415E+00	52428E+00	0.	14396E+00	40781E-01	0.	-17255E+01	10307E+01	0.
91000E+00	-90273E+00	50964E+00	0.	12499E+00	46010E-01	0.	-17609E+01	89114E+00	0.
92000E+00	-90118E+00	49510E+00	0.	10450E+00	48253E-01	0.	-17955E+01	75508E+00	0.
93000E+00	-89953E+00	48063E+00	0.	82673E-01	47737E-01	0.	-18295E+01	62226E+00	0.
94000E+00	-89777E+00	46620E+00	0.	59698E-01	44665E-01	0.	-18628E+01	49238E+00	0.
95000E+00	-89591E+00	45179E+00	0.	35735E-01	39223E-01	0.	-18956E+01	36518E+00	0.
96000E+00	-89396E+00	43738E+00	0.	10926E-01	31584E-01	0.	-19280E+01	24041E+00	0.
97000E+00	-89193E+00	42295E+00	0.	-14598E-01	21900E-01	0.	-19600E+01	11785E+00	0.
98000E+00	-88982E+00	40847E+00	0.	-40725E-01	10315E-01	0.	-19916E+01	-27187E-02	0.
99000E+00	-88764E+00	39394E+00	0.	-67352E-01	-30425E-02	0.	-20230E+01	-12148E+00	0.
10000E+00	-88539E+00	37933E+00	0.	-94389E-01	-18053E-01	0.	-20541E+01	-23861E+00	0.
THETA= .87266E+00									
88000E+00	-57294E+00	55396E+00	0.	67529E-01	20355E-01	0.	-17491E+01	16688E+01	0.
89000E+00	-57254E+00	53904E+00	0.	56082E-01	32321E-01	0.	-17485E+01	15421E+01	0.
90000E+00	-57204E+00	52428E+00	0.	43209E-01	40781E-01	0.	-17480E+01	14191E+01	0.
91000E+00	-57145E+00	50964E+00	0.	29081E-01	46010E-01	0.	-17477E+01	12993E+01	0.
92000E+00	-57078E+00	49510E+00	0.	13851E-01	48253E-01	0.	-17476E+01	11826E+01	0.
93000E+00	-57004E+00	48063E+00	0.	-23462E-02	47737E-01	0.	-17476E+01	10686E+01	0.
94000E+00	-56923E+00	46620E+00	0.	19389E-01	44665E-01	0.	-17479E+01	95710E+00	0.
95000E+00	-56837E+00	45179E+00	0.	37169E-01	39223E-01	0.	-17484E+01	84788E+00	0.
96000E+00	-56744E+00	43738E+00	0.	-55589E-01	31584E-01	0.	-17490E+01	74073E+00	0.
97000E+00	-56647E+00	42295E+00	0.	74563E-01	21900E-01	0.	-17499E+01	63547E+00	0.
98000E+00	-56544E+00	40847E+00	0.	-94013E-01	10315E-01	0.	-17510E+01	53191E+00	0.
99000E+00	-56438E+00	39394E+00	0.	-11387E+00	-30425E-02	0.	-17522E+01	42991E+00	0.
10000E+00	-56327E+00	37933E+00	0.	-13408E+00	-18053E-01	0.	-17537E+01	32932E+00	0.
THETA= .10472E+01									
88000E+00	-25943E+00	48714E+00	0.	34722E-01	17900E-01	0.	-18405E+01	19946E+01	0.
89000E+00	-25971E+00	47402E+00	0.	42657E-01	28422E-01	0.	-18042E+01	18878E+01	0.
90000E+00	-25995E+00	46104E+00	0.	51462E-01	35863E-01	0.	-17692E+01	17840E+01	0.
91000E+00	-26015E+00	44817E+00	0.	61047E-01	40461E-01	0.	-17353E+01	16829E+01	0.
92000E+00	-26030E+00	43538E+00	0.	71330E-01	42433E-01	0.	-17025E+01	15843E+01	0.
93000E+00	-26042E+00	42266E+00	0.	82238E-01	41979E-01	0.	-16707E+01	14880E+01	0.
94000E+00	-26051E+00	40977E+00	0.	93706E-01	39277E-01	0.	-16399E+01	13938E+01	0.
95000E+00	-26058E+00	39730E+00	0.	10568E+00	34492E-01	0.	-16100E+01	13015E+01	0.
96000E+00	-26061E+00	38462E+00	0.	11809E+00	27774E-01	0.	-15808E+01	12109E+01	0.
97000E+00	-26063E+00	37193E+00	0.	13091E+00	19259E-01	0.	-15525E+01	11219E+01	0.
98000E+00	-26063E+00	35921E+00	0.	14409E+00	90708E-02	0.	-15248E+01	10343E+01	0.
99000E+00	-26061E+00	34642E+00	0.	15759E+00	-26755E-02	0.	-14978E+01	94805E+00	0.
10000E+00	-26057E+00	33358E+00	0.	17137E+00	-15876E-01	0.	-14715E+01	86299E+00	0.
THETA= .12217E+01									
88000E+00	-38508E-02	36157E+00	0.	11808E+00	13286E-01	0.	-19150E+01	22602E+01	0.
89000E+00	-46982E-02	35183E+00	0.	12315E+00	21096E-01	0.	-18496E+01	21696E+01	0.
90000E+00	-55371E-02	34220E+00	0.	12864E+00	26618E-01	0.	-17864E+01	20815E+01	0.
91000E+00	-63692E-02	33265E+00	0.	13452E+00	30031E-01	0.	-17252E+01	19956E+01	0.

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FEE= .17453E+00  
THETA= 0.

R	UBAK	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.17004E+01	0.	0.	.43525E+00	0.	0.	-.13626E+01	.43922E+00	.32750E+00
.89000E+00	-.16975E+01	0.	0.	.41117E+00	0.	0.	-.14923E+01	.24327E+00	.31595E+00
.90000E+00	-.16944E+01	0.	0.	.38367E+00	0.	0.	-.16182E+01	.53128E-01	.30416E+00
.91000E+00	-.16913E+01	0.	0.	.35321E+00	0.	0.	-.17406E+01	.13174E+00	.29279E+00
.92000E+00	-.16873E+01	0.	0.	.32018E+00	0.	0.	-.18599E+01	.31181E+00	.28173E+00
.93000E+00	-.16835E+01	0.	0.	.28497E+00	0.	0.	-.19764E+01	.48752E+00	.27095E+00
.94000E+00	-.16795E+01	0.	0.	.24788E+00	0.	0.	-.20903E+01	.65927E+00	.26043E+00
.95000E+00	-.16753E+01	0.	0.	.20920E+00	0.	0.	-.22019E+01	.82744E+00	.25014E+00
.96000E+00	-.16709E+01	0.	0.	.16919E+00	0.	0.	-.23115E+01	.99237E+00	.24007E+00
.97000E+00	-.16663E+01	0.	0.	.12808E+00	0.	0.	-.24193E+01	.11544E+01	.23019E+00
.98000E+00	-.16616E+01	0.	0.	.8609E-01	0.	0.	-.25253E+01	.13137E+01	.22050E+00
.99000E+00	-.16568E+01	0.	0.	.43337E-01	0.	0.	-.26300E+01	.14707E+01	.21098E+00
.10000E+01	-.16519E+01	0.	0.	.43952E-04	0.	0.	-.27333E+01	.16255E+01	.20161E+00

THETA= .17453E+00

R	UBAK	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.16412E+01	.19674E+00	.25053E-01	.41646E+00	.74703E-02	.23093E-02	-.13797E+01	.50394E+00	.32292E+00
.89000E+00	-.16384E+01	.19145E+00	.24407E-01	.39305E+00	.11740E-01	.29682E-02	-.15027E+01	.30875E+00	.31105E+00
.90000E+00	-.16354E+01	.18621E+00	.23767E-01	.36632E+00	.14766E-01	.34686E-02	-.16220E+01	.12224E+00	.29954E+00
.91000E+00	-.16322E+01	.18101E+00	.23134E-01	.33671E+00	.16643E-01	.39228E-02	-.17381E+01	.59093E-01	.28835E+00
.92000E+00	-.16287E+01	.17585E+00	.22504E-01	.30463E+00	.17460E-01	.40420E-02	-.18513E+01	.23573E+00	.27745E+00
.93000E+00	-.16250E+01	.17072E+00	.21879E-01	.27041E+00	.17297E-01	.41364E-02	-.19617E+01	.40409E+00	.26584E+00
.94000E+00	-.16211E+01	.16560E+00	.21255E-01	.23438E+00	.16226E-01	.41153E-02	-.20698E+01	.57658E+00	.25647E+00
.95000E+00	-.16171E+01	.16049E+00	.20632E-01	.19680E+00	.14314E-01	.39870E-02	-.21756E+01	.74155E+00	.24634E+00
.96000E+00	-.16129E+01	.15537E+00	.20010E-01	.15793E+00	.11622E-01	.37593E-02	-.22796E+01	.90334E+00	.23642E+00
.97000E+00	-.16085E+01	.15025E+00	.19387E-01	.11798E+00	.92030E-02	.34393E-02	-.23818E+01	.10623E+01	.22670E+00
.98000E+00	-.16040E+01	.14512E+00	.18762E-01	.77165E-01	.41091E-02	.30374E-02	-.24824E+01	.12186E+01	.21715E+00
.99000E+00	-.15994E+01	.13966E+00	.18135E-01	.35638E-01	-.61429E-03	.25474E-02	-.25817E+01	.13725E+01	.20777E+00
.10000E+01	-.15946E+01	.13478E+00	.17504E-01	-.64365E-02	-.59249E-02	.19867E-02	-.26798E+01	.15244E+01	.19854E+00

THETA= .34907E+00

R	UBAK	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.14707E+01	.36975E+00	.49345E-01	.36236E+00	.14040E-01	.45485E-02	-.14290E+01	.67865E+00	.30812E+00
.89000E+00	-.14683E+01	.35980E+00	.48072E-01	.34085E+00	.22064E-01	.58463E-02	-.15326E+01	.49727E+00	.29680E+00
.90000E+00	-.14656E+01	.34996E+00	.46812E-01	.31634E+00	.27750E-01	.68319E-02	-.16331E+01	.32124E+00	.28581E+00
.91000E+00	-.14628E+01	.34019E+00	.45564E-01	.28922E+00	.31278E-01	.75295E-02	-.17309E+01	.15008E+00	.27514E+00
.92000E+00	-.14598E+01	.33050E+00	.44325E-01	.25983E+00	.32814E-01	.79613E-02	-.18263E+01	.16666E-01	.26474E+00
.93000E+00	-.14566E+01	.32085E+00	.43092E-01	.22850E+00	.32508E-01	.81472E-02	-.19194E+01	.17939E+00	.25461E+00
.94000E+00	-.14532E+01	.31123E+00	.41864E-01	.19551E+00	.30496E-01	.81055E-02	-.20105E+01	.33947E+00	.24472E+00
.95000E+00	-.14496E+01	.30162E+00	.40638E-01	.16110E+00	.26902E-01	.78529E-02	-.20999E+01	.49424E+00	.23505E+00
.96000E+00	-.14460E+01	.29201E+00	.39412E-01	.12551E+00	.21942E-01	.74044E-02	-.21876E+01	.64700E+00	.22559E+00
.97000E+00	-.14421E+01	.28239E+00	.38144E-01	.88923E-01	.15417E-01	.67741E-02	-.22739E+01	.79706E+00	.21631E+00
.98000E+00	-.14382E+01	.27274E+00	.36944E-01	.51526E-01	.77225E-02	.59745E-02	-.23589E+01	.94466E+00	.20720E+00
.99000E+00	-.14341E+01	.26304E+00	.35719E-01	.13473E-01	-.11545E-02	.50173E-02	-.24423E+01	.10901E+01	.19825E+00
.10000E+01	-.14299E+01	.25330E+00	.34477E-01	-.25096E-01	-.111135E-01	.39130E-02	-.25257E+01	.12335E+01	.18945E+00

THETA= .52360E+00

R	UBAK	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.12094E+01	.49816E+00	.72138E-01	.27946E+00	.18916E-01	.66495E-02	-.15045E+01	.95091E+00	.24397E+00
.89000E+00	-.12075E+01	.48476E+00	.70276E-01	.26089E+00	.29727E-01	.85467E-02	-.15784E+01	.78611E+00	.23735E+00
.90000E+00	-.12056E+01	.47149E+00	.68435E-01	.23978E+00	.37348E-01	.99875E-02	-.16501E+01	.62014E+00	.23441E+00
.91000E+00	-.12034E+01	.45834E+00	.66611E-01	.21645E+00	.42141E-01	.11007E-01	-.17199E+01	.47055E+00	.23357E+00
.92000E+00	-.12010E+01	.44528E+00	.64799E-01	.19120E+00	.44211E-01	.11639E-01	-.17890E+01	.31896E+00	.24397E+00
.93000E+00	-.11985E+01	.43228E+00	.62997E-01	.16429E+00	.43798E-01	.11910E-01	-.18546E+01	.17090E+00	.23465E+00
.94000E+00	-.11959E+01	.41931E+00	.61201E-01	.13595E+00	.41087E-01	.11849E-01	-.19198E+01	.26335E-01	.22554E+00
.95000E+00	-.11931E+01	.40637E+00	.59408E-01	.10641E+00	.36246E-01	.11440E-01	-.19838E+01	.11533E+00	.21663E+00



.96000E+00	-.11902E+01	.39342E+00	.57616E-01	.75832E-01	.29427E-01	.10825E-01	-.20466E+01	-.25427E+00	.20790E+00
.97000E+00	-.11872E+01	.38046E+00	.55822E-01	.44395E-01	.20771E-01	.99031E-02	-.21086E+01	-.39075E+00	.19935E+00
.98000E+00	-.11641E+01	.36745E+00	.54023E-01	.42245E-01	.10405E-01	.87342E-02	-.21696E+01	-.52501E+00	.19096E+00
.99000E+00	-.11809E+01	.35440E+00	.52217E-01	-.20487E-01	-.15554E-02	.73348E-02	-.22299E+01	-.65725E+00	.18271E+00
.10000E+00	-.11776E+01	.34127E+00	.50402E-01	-.53685E-01	-.15002E-01	.57204E-02	-.22896E+01	-.78768E+00	.17460E+00
THETA= .69813E+00									
.88000E+00	-.88888E+00	.56648E+00	.92738E-01	.17778E+00	.21510E-01	.85484E-02	-.15972E+01	-.12849E+01	.25118E+00
.89000E+00	-.88776E+00	.55124E+00	.90345E-01	.16281E+00	.33805E-01	.10987E-01	-.16346E+01	-.11404E+01	.24195E+00
.90000E+00	-.88649E+00	.53616E+00	.87979E-01	.14586E+00	.42510E-01	.12840E-01	-.16710E+01	-.10001E+01	.23300E+00
.91000E+00	-.88510E+00	.52121E+00	.85633E-01	.12719E+00	.47921E-01	.14151E-01	-.17064E+01	-.86366E+00	.22429E+00
.92000E+00	-.88358E+00	.50635E+00	.83304E-01	.10701E+00	.50274E-01	.14962E-01	-.17411E+01	-.73065E+00	.21582E+00
.93000E+00	-.88194E+00	.49157E+00	.80987E-01	.85518E-01	.49805E-01	.15312E-01	-.17751E+01	-.60081E+00	.20750E+00
.94000E+00	-.88021E+00	.47682E+00	.78678E-01	.62901E-01	.46722E-01	.15233E-01	-.18085E+01	-.47383E+00	.19950E+00
.95000E+00	-.87838E+00	.46210E+00	.76374E-01	.39313E-01	.41217E-01	.14759E-01	-.18414E+01	-.34947E+00	.19162E+00
.96000E+00	-.87647E+00	.44738E+00	.74070E-01	.14896E-01	.33463E-01	.13916E-01	-.18738E+01	-.22749E+00	.18390E+00
.97000E+00	-.87447E+00	.43264E+00	.71763E-01	-.10226E-01	.23620E-01	.12731E-01	-.19058E+01	-.10766E+00	.17634E+00
.98000E+00	-.87240E+00	.41785E+00	.69451E-01	-.35940E-01	.11832E-01	.11228E-01	-.19374E+01	-.10224E-01	.16891E+00
.99000E+00	-.87025E+00	.40301E+00	.67129E-01	-.62145E-01	-.17688E-02	.94295E-02	-.19688E+01	-.12634E+00	.16162E+00
.10000E+00	-.86804E+00	.38808E+00	.64795E-01	-.88754E-01	-.17060E-01	.73540E-02	-.20000E+01	-.24086E+00	.15444E+00
THETA= .87266E+00									
.88000E+00	-.54782E+00	.56648E+00	.11052E+00	.69564E-01	.21510E-01	.10188E-01	-.16958E+01	-.16403E+01	.21077E+00
.89000E+00	-.54744E+00	.55124E+00	.10767E+00	.58427E-01	.33805E-01	.13094E-01	-.16944E+01	-.15175E+01	.20302E+00
.90000E+00	-.54696E+00	.53616E+00	.10485E+00	.45916E-01	.42510E-01	.15302E-01	-.16931E+01	-.13981E+01	.19551E+00
.91000E+00	-.54640E+00	.52121E+00	.10205E+00	.32196E-01	.47921E-01	.16864E-01	-.16921E+01	-.12820E+01	.18823E+00
.92000E+00	-.54577E+00	.50635E+00	.99278E-01	.17411E-01	.50274E-01	.17831E-01	-.16912E+01	-.11688E+01	.18110E+00
.93000E+00	-.54507E+00	.49157E+00	.96517E-01	.16941E-02	.49805E-01	.18248E-01	-.16905E+01	-.10582E+01	.17417E+00
.94000E+00	-.54430E+00	.47682E+00	.93765E-01	-.14840E-01	.46722E-01	.18154E-01	-.16901E+01	-.95005E+00	.16740E+00
.95000E+00	-.54348E+00	.46210E+00	.91019E-01	-.32086E-01	.41217E-01	.17589E-01	-.16898E+01	-.84410E+00	.16079E+00
.96000E+00	-.54260E+00	.44738E+00	.88273E-01	-.49951E-01	.33463E-01	.16584E-01	-.16899E+01	-.74016E+00	.15431E+00
.97000E+00	-.54167E+00	.43264E+00	.85524E-01	-.68353E-01	.23620E-01	.15172E-01	-.16899E+01	-.63805E+00	.14797E+00
.98000E+00	-.54070E+00	.41785E+00	.82768E-01	-.87217E-01	.11832E-01	.13382E-01	-.16903E+01	-.53760E+00	.14174E+00
.99000E+00	-.53968E+00	.40301E+00	.80001E-01	-.10648E+00	-.17688E-02	.11238E-01	-.16909E+01	-.43864E+00	.13561E+00
.10000E+00	-.53863E+00	.38808E+00	.77220E-01	-.12607E+00	-.17060E-01	.87642E-02	-.16918E+01	-.34105E+00	.12959E+00
THETA= .10472E+01									
.88000E+00	-.22732E+00	.49816E+00	.12495E+00	-.32122E-01	.18916E-01	.11517E-01	-.17885E+01	-.19743E+01	.16395E+00
.89000E+00	-.22763E+00	.48476E+00	.12172E+00	-.39660E-01	.29727E-01	.14803E-01	-.17505E+01	-.18718E+01	.15792E+00
.90000E+00	-.22791E+00	.47149E+00	.11853E+00	-.48002E-01	.37388E-01	.17299E-01	-.17140E+01	-.17722E+01	.15208E+00
.91000E+00	-.22814E+00	.45834E+00	.11537E+00	-.57067E-01	.42141E-01	.19065E-01	-.16785E+01	-.16751E+01	.14640E+00
.92000E+00	-.22834E+00	.44528E+00	.11224E+00	-.66780E-01	.44211E-01	.20159E-01	-.16443E+01	-.15805E+01	.14087E+00
.93000E+00	-.22851E+00	.43228E+00	.10911E+00	-.77075E-01	.43798E-01	.20629E-01	-.16110E+01	-.14880E+01	.13548E+00
.94000E+00	-.22865E+00	.41931E+00	.10600E+00	-.87892E-01	.41087E-01	.20524E-01	-.15788E+01	-.13975E+01	.13021E+00
.95000E+00	-.22877E+00	.40637E+00	.10290E+00	-.99179E-01	.36246E-01	.19894E-01	-.15474E+01	-.13089E+01	.12507E+00
.96000E+00	-.22886E+00	.39342E+00	.99794E-01	-.11089E+00	.29427E-01	.18749E-01	-.15169E+01	-.12219E+01	.12003E+00
.97000E+00	-.22894E+00	.38046E+00	.96686E-01	-.12297E+00	.20771E-01	.17153E-01	-.14871E+01	-.11365E+01	.11510E+00
.98000E+00	-.22900E+00	.36745E+00	.93570E-01	-.13540E+00	.10405E-01	.15128E-01	-.14581E+01	-.10524E+01	.11025E+00
.99000E+00	-.22904E+00	.35440E+00	.90443E-01	-.14813E+00	-.15554E-02	.12704E-01	-.14298E+01	-.96955E+00	.10549E+00
.10000E+00	-.22908E+00	.34127E+00	.87299E-01	-.16114E+00	-.15002E-01	.99080E-02	-.14022E+01	-.88787E+00	.10080E+00
THETA= .12217E+01									
.88000E+00	-.33953E-01	.36975E+00	.13557E+00	-.11502E+00	.14040E-01	.12497E-01	-.18640E+01	-.22465E-01	.11215E+00
.89000E+00	-.33071E-01	.35980E+00	.13208E+00	-.11962E+00	.22064E-01	.16063E-01	-.17964E+01	-.21606E-01	.10803E+00
.90000E+00	-.32192E-01	.34996E+00	.12862E+00	-.12456E+00	.27750E-01	.18770E-01	-.17309E+01	-.20770E-01	.10403E+00
.91000E+00	-.31314E-01	.34019E+00	.12519E+00	-.12983E+00	.31278E-01	.20687E-01	-.16675E+01	-.19956E-01	.10014E+00

.92000E+00 .30435E-01 .33050E+00 .12178E+00 -.13541E+00 .32814E-01 .21873E-01 -.16060E+01 .19161E+01 .96359E-01  
 .93000E+00 .29557E-01 .32085E+00 .11840E+00 -.14129E+00 .32508E-01 .22384E-01 -.15462E+01 .18384E+01 .92672E-01  
 .94000E+00 .28675E-01 .31123E+00 .11502E+00 -.14745E+00 .30496E-01 .22270E-01 -.14880E+01 .17624E+01 .89072E-01  
 .95000E+00 .27789E-01 .30162E+00 .11165E+00 -.15387E+00 .26932E-01 .21576E-01 -.14313E+01 .16878E+01 .85553E-01  
 .96000E+00 .26899E-01 .29201E+00 .10828E+00 -.16056E+00 .21842E-01 .20344E-01 -.13759E+01 .16147E+01 .82108E-01  
 .97000E+00 .26003E-01 .28239E+00 .10491E+00 -.16750E+00 .15417E-01 .18612E-01 -.13218E+01 .15428E+01 .78731E-01  
 .98000E+00 .25100E-01 .27274E+00 .10153E+00 -.17468E+00 .77225E-02 .16415E-01 -.12689E+01 .14720E+01 .75416E-01  
 .99000E+00 .24190E-01 .26304E+00 .98136E-01 -.18209E+00 -.11545E-02 .13785E-01 -.12170E+01 .14024E+01 .72159E-01  
 .10000E+01 .21271E-01 .25330E+00 .92725E-01 -.18973E+00 -.11135E-01 .10751E-01 -.11661E+01 .13336E+01 .68954E-01  
 THETA= .13963E+01

.88000E+00 .20449E+00 .19674E+00 .14208E+00 -.16912E+00 .74703E-02 .13097E-01 -.19134E+01 .24242E+01 .56939E-01  
 .89000E+00 .20323E+00 .19145E+00 .13842E+00 -.17181E+00 .11740E-01 .16834E-01 -.18263E+01 .23492E+01 .54847E-01  
 .90000E+00 .20196E+00 .18621E+00 .13479E+00 -.17454E+00 .14766E-01 .19672E-01 -.17420E+01 .22760E+01 .52816E-01  
 .91000E+00 .20066E+00 .18101E+00 .12763E+00 -.17733E+00 .16643E-01 .21680E-01 -.16604E+01 .22048E+01 .50843E-01  
 .92000E+00 .19934E+00 .17585E+00 .12763E+00 -.18021E+00 .17460E-01 .22924E-01 -.15810E+01 .22135E+01 .48923E-01  
 .93000E+00 .19800E+00 .17072E+00 .12408E+00 -.18320E+00 .17297E-01 .23459E-01 -.15039E+01 .20671E+01 .47051E-01  
 .94000E+00 .19663E+00 .16560E+00 .12054E+00 -.18632E+00 .16226E-01 .23339E-01 -.14288E+01 .20005E+01 .45223E-01  
 .95000E+00 .19524E+00 .16049E+00 .11701E+00 -.18957E+00 .14314E-01 .22611E-01 -.13555E+01 .19351E+01 .43436E-01  
 .96000E+00 .19383E+00 .15537E+00 .11348E+00 -.19299E+00 .11622E-01 .21320E-01 -.12839E+01 .18710E+01 .41687E-01  
 .97000E+00 .19240E+00 .15025E+00 .10995E+00 -.19657E+00 .82030E-02 .19505E-01 -.12139E+01 .18080E+01 .39973E-01  
 .98000E+00 .19095E+00 .14512E+00 .10640E+00 -.20032E+00 .41091E-02 .17203E-01 -.11453E+01 .17459E+01 .38290E-01  
 .99000E+00 .18948E+00 .13996E+00 .10285E+00 -.20426E+00 -.61429E-03 .14447E-01 -.10780E+01 .15848E+01 .36636E-01  
 .10000E+01 .18798E+00 .13478E+00 .99272E-01 -.20839E+00 -.59249E-02 .11267E-01 -.10120E+01 .16246E+01 .35009E-01  
 THETA= .15708E+01

.88000E+00 .26371E+00 .30724E-13 .14428E+00 -.18791E+00 .11666E-14 .13299E-01 -.19305E+01 .24860E+01 .87570E-14  
 .89000E+00 .26233E+00 .29898E-13 .14055E+00 -.18994E+00 .18335E-14 .17093E-01 -.18367E+01 .24146E+01 .84352E-14  
 .90000E+00 .26092E+00 .29080E-13 .13687E+00 -.19189E+00 .23059E-14 .19975E-01 -.17450E+01 .23452E+01 .81230E-14  
 .91000E+00 .25947E+00 .28269E-13 .13322E+00 -.19382E+00 .25991E-14 .22015E-01 -.16579E+01 .22774E+01 .78195E-14  
 .92000E+00 .25800E+00 .27463E-13 .12960E+00 -.19577E+00 .27267E-14 .23277E-01 -.15724E+01 .22112E+01 .75242E-14  
 .93000E+00 .25649E+00 .26661E-13 .12599E+00 -.19776E+00 .27013E-14 .23821E-01 -.14892E+01 .21465E+01 .72363E-14  
 .94000E+00 .25496E+00 .25862E-13 .12240E+00 -.19982E+00 .25341E-14 .23699E-01 -.14082E+01 .20832E+01 .69552E-14  
 .95000E+00 .25340E+00 .25063E-13 .11882E+00 -.20197E+00 .23355E-14 .22960E-01 -.13292E+01 .20210E+01 .66804E-14  
 .96000E+00 .25181E+00 .24265E-13 .11523E+00 -.20425E+00 .18149E-14 .21649E-01 -.12520E+01 .19600E+01 .64114E-14  
 .97000E+00 .25019E+00 .23465E-13 .11164E+00 -.20666E+00 .12811E-14 .19806E-01 -.11764E+01 .19001E+01 .61477E-14  
 .98000E+00 .24855E+00 .22663E-13 .10805E+00 -.20923E+00 .64171E-15 .17468E-01 -.11024E+01 .18411E+01 .58838E-14  
 .99000E+00 .24688E+00 .21858E-13 .10443E+00 -.21196E+00 -.95933E-16 .14670E-01 -.10298E+01 .17830E+01 .56345E-14  
 .10000E+01 .24518E+00 .21048E-13 .10080E+00 -.21487E+00 -.92529E-15 .11441E-01 -.95844E+00 .17257E+01 .53843E-14  
 THETA= .17453E+01

.88000E+00 .20449E+00 .19674E+00 .14208E+00 -.16912E+00 .74703E-02 .13097E-01 -.19134E+01 .24242E+01 .56939E-01  
 .89000E+00 .20323E+00 .19145E+00 .13842E+00 -.17181E+00 .11740E-01 .16834E-01 -.18263E+01 .23492E+01 .54847E-01  
 .90000E+00 .20196E+00 .18621E+00 .13479E+00 -.17454E+00 .14766E-01 .19672E-01 -.17420E+01 .22760E+01 .52816E-01  
 .91000E+00 .20066E+00 .18101E+00 .12763E+00 -.17733E+00 .16643E-01 .21680E-01 -.16604E+01 .22048E+01 .50843E-01  
 .92000E+00 .19934E+00 .17585E+00 .12763E+00 -.18021E+00 .17460E-01 .22924E-01 -.15810E+01 .22135E+01 .48923E-01  
 .93000E+00 .19800E+00 .17072E+00 .12408E+00 -.18320E+00 .17297E-01 .23459E-01 -.15039E+01 .20671E+01 .47051E-01  
 .94000E+00 .19663E+00 .16560E+00 .12054E+00 -.18632E+00 .16226E-01 .23339E-01 -.14288E+01 .20005E+01 .45223E-01  
 .95000E+00 .19524E+00 .16049E+00 .11701E+00 -.18957E+00 .14314E-01 .22611E-01 -.13555E+01 .19351E+01 .43436E-01  
 .96000E+00 .19383E+00 .15537E+00 .11348E+00 -.19299E+00 .11622E-01 .21320E-01 -.12839E+01 .18710E+01 .41687E-01  
 .97000E+00 .19240E+00 .15025E+00 .10995E+00 -.19657E+00 .82030E-02 .19505E-01 -.12139E+01 .18080E+01 .39973E-01  
 .98000E+00 .19095E+00 .14512E+00 .10640E+00 -.20032E+00 .41091E-02 .17203E-01 -.11453E+01 .17459E+01 .38290E-01  
 .99000E+00 .18948E+00 .13996E+00 .10285E+00 -.20426E+00 -.61429E-03 .14447E-01 -.10780E+01 .15848E+01 .36636E-01  
 .10000E+01 .18798E+00 .13478E+00 .99272E-01 -.20839E+00 -.59249E-02 .11267E-01 -.10120E+01 .16246E+01 .35009E-01  
 THETA= .19199E+01

.88000E+00 .20449E+00 .19674E+00 .14208E+00 -.16912E+00 .74703E-02 .13097E-01 -.19134E+01 .24242E+01 .56939E-01  
 .89000E+00 .20323E+00 .19145E+00 .13842E+00 -.17181E+00 .11740E-01 .16834E-01 -.18263E+01 .23492E+01 .54847E-01  
 .90000E+00 .20196E+00 .18621E+00 .13479E+00 -.17454E+00 .14766E-01 .19672E-01 -.17420E+01 .22760E+01 .52816E-01  
 .91000E+00 .20066E+00 .18101E+00 .12763E+00 -.17733E+00 .16643E-01 .21680E-01 -.16604E+01 .22048E+01 .50843E-01  
 .92000E+00 .19934E+00 .17585E+00 .12763E+00 -.18021E+00 .17460E-01 .22924E-01 -.15810E+01 .22135E+01 .48923E-01  
 .93000E+00 .19800E+00 .17072E+00 .12408E+00 -.18320E+00 .17297E-01 .23459E-01 -.15039E+01 .20671E+01 .47051E-01  
 .94000E+00 .19663E+00 .16560E+00 .12054E+00 -.18632E+00 .16226E-01 .23339E-01 -.14288E+01 .20005E+01 .45223E-01  
 .95000E+00 .19524E+00 .16049E+00 .11701E+00 -.18957E+00 .14314E-01 .22611E-01 -.13555E+01 .19351E+01 .43436E-01  
 .96000E+00 .19383E+00 .15537E+00 .11348E+00 -.19299E+00 .11622E-01 .21320E-01 -.12839E+01 .18710E+01 .41687E-01  
 .97000E+00 .19240E+00 .15025E+00 .10995E+00 -.19657E+00 .82030E-02 .19505E-01 -.12139E+01 .18080E+01 .39973E-01  
 .98000E+00 .19095E+00 .14512E+00 .10640E+00 -.20032E+00 .41091E-02 .17203E-01 -.11453E+01 .17459E+01 .38290E-01  
 .99000E+00 .18948E+00 .13996E+00 .10285E+00 -.20426E+00 -.61429E-03 .14447E-01 -.10780E+01 .15848E+01 .36636E-01  
 .10000E+01 .18798E+00 .13478E+00 .99272E-01 -.20839E+00 -.59249E-02 .11267E-01 -.10120E+01 .16246E+01 .35009E-01  
 THETA= .19199E+01

.88000E+00	.33953E-01	-.36975E+00	.13557E+00	-.11502E+00	-.14040E-01	.12497E-01	-.18640E+01	.22465E+01	-.11215E+00
.89000E+00	.33071E-01	-.35980E+00	.13208E+00	-.11962E+00	-.22064E-01	.16063E-01	-.17964E+01	.21606E+01	-.10803E+00
.90000E+00	.32192E-01	-.34996E+00	.12862E+00	-.12456E+00	-.27750E-01	.18770E-01	-.17309E+01	.20770E+01	-.10403E+00
.91000E+00	.31314E-01	-.34019E+00	.12519E+00	-.12983E+00	-.31278E-01	.20687E-01	-.16675E+01	.19956E+01	-.10014E+00
.92000E+00	.30436E-01	-.33050E+00	.12178E+00	-.13541E+00	-.32814E-01	.21873E-01	-.16060E+01	.19161E+01	-.96359E-01
.93000E+00	.29557E-01	-.32085E+00	.11840E+00	-.14129E+00	-.32508E-01	.22384E-01	-.15462E+01	.18384E+01	-.92672E-01
.94000E+00	.28675E-01	-.31123E+00	.11502E+00	-.14745E+00	-.30496E-01	.22270E-01	-.14880E+01	.17624E+01	-.89072E-01
.95000E+00	.27789E-01	-.30162E+00	.11165E+00	-.15387E+00	-.26902E-01	.21576E-01	-.14313E+01	.16878E+01	-.85553E-01
.96000E+00	.26899E-01	-.29201E+00	.10828E+00	-.16056E+00	-.21842E-01	.20344E-01	-.13759E+01	.16147E+01	-.82108E-01
.97000E+00	.26003E-01	-.28239E+00	.10491E+00	-.16750E+00	-.15417E-01	.18612E-01	-.13218E+01	.15425E+01	-.78731E-01
.98000E+00	.25100E-01	-.27274E+00	.10153E+00	-.17468E+00	-.77225E-02	.16415E-01	-.12689E+01	.14720E+01	-.75416E-01
.99000E+00	.24190E-01	-.26304E+00	.98136E-01	-.18209E+00	.11545E-02	.13785E-01	-.12170E+01	.14024E+01	-.72159E-01
.10000E+01	.23271E-01	-.25330E+00	.94725E-01	-.18973E+00	.11135E-01	.10751E-01	-.11661E+01	.13336E+01	-.68954E-01

FEE= -34907E+00  
THETA= 0.

R									
UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SIFF	SIFF
-88000E+00	-17004E+01	0.	-43525E+00	0.	0.	-11961E+01	-27275E+00	-27275E+00	-61625E+00
-89000E+00	-16975E+01	0.	-41117E+00	0.	0.	-13319E+01	-82913E-01	-82913E-01	-59360E+00
-90000E+00	-16944E+01	0.	-38367E+00	0.	0.	-14638E+01	-10130E+00	-10130E+00	-57163E+00
-91000E+00	-16910E+01	0.	-35321E+00	0.	0.	-15920E+01	-28039E+00	-28039E+00	-55027E+00
-92000E+00	-16873E+01	0.	-32018E+00	0.	0.	-17169E+01	-45485E+00	-45485E+00	-52949E+00
-93000E+00	-16835E+01	0.	-28497E+00	0.	0.	-18388E+01	-62508E+00	-62508E+00	-50923E+00
-94000E+00	-16795E+01	0.	-24788E+00	0.	0.	-19581E+01	-79149E+00	-79149E+00	-48945E+00
-95000E+00	-16753E+01	0.	-20920E+00	0.	0.	-20749E+01	-95444E+00	-95444E+00	-47011E+00
-96000E+00	-16709E+01	0.	-16919E+00	0.	0.	-21896E+01	-11143E+01	-11143E+01	-45118E+00
-97000E+00	-16663E+01	0.	-12808E+00	0.	0.	-23024E+01	-12712E+01	-12712E+01	-43262E+00
-98000E+00	-16616E+01	0.	-86069E-01	0.	0.	-24134E+01	-14256E+01	-14256E+01	-41441E+00
-99000E+00	-16568E+01	0.	-43337E-01	0.	0.	-25228E+01	-15778E+01	-15778E+01	-39651E+00
-10000E+01	-16519E+01	0.	-43952E-04	0.	0.	-26309E+01	-17278E+01	-17278E+01	-37890E+00

THETA= -17453E+00

R									
UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SIFF	SIFF
-88000E+00	-16375E+01	-47085E-01	-41676E+00	-86250E-02	-43401E-02	-12139E+01	-33881E+00	-33881E+00	-60689E+00
-89000E+00	-16347E+01	-45870E-01	-39339E+00	-13224E-01	-55784E-02	-13422E+01	-15298E+00	-15298E+00	-58458E+00
-90000E+00	-16317E+01	-44668E-01	-36672E+00	-16500E-01	-65189E-02	-14674E+01	-27345E-01	-27345E-01	-56294E+00
-91000E+00	-16285E+01	-43477E-01	-33717E+00	-18554E-01	-71846E-02	-15889E+01	-20267E+00	-20267E+00	-54191E+00
-92000E+00	-16250E+01	-42295E-01	-30515E+00	-19481E-01	-75966E-02	-17072E+01	-37346E+00	-37346E+00	-52144E+00
-93000E+00	-16213E+01	-41118E-01	-27101E+00	-19365E-01	-77740E-02	-18238E+01	-54013E+00	-54013E+00	-50149E+00
-94000E+00	-16175E+01	-39946E-01	-23505E+00	-18284E-01	-77342E-02	-19358E+01	-70305E+00	-70305E+00	-48201E+00
-95000E+00	-16134E+01	-38776E-01	-19755E+00	-16308E-01	-74931E-02	-20465E+01	-86258E+00	-86258E+00	-46297E+00
-96000E+00	-16092E+01	-37606E-01	-15877E+00	-13501E-01	-70652E-02	-21552E+01	-10190E+01	-10190E+01	-44432E+00
-97000E+00	-16049E+01	-36435E-01	-11891E+00	-99227E-02	-64638E-02	-22620E+01	-11727E+01	-11727E+01	-42605E+00
-98000E+00	-16004E+01	-35261E-01	-78170E-01	-56257E-02	-57008E-02	-23673E+01	-13239E+01	-13239E+01	-40811E+00
-99000E+00	-15958E+01	-34082E-01	-36733E-01	-65939E-03	-47875E-02	-24710E+01	-14729E+01	-14729E+01	-39048E+00
-10000E+01	-15910E+01	-32898E-01	-52523E-02	-49316E-02	-37337E-02	-25735E+01	-16193E+01	-16193E+01	-37314E+00

THETA= -34907E+00

R									
UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SIFF	SIFF
-88000E+00	-14562E+01	-92738E-01	-36352E+00	-16210E-01	-85484E-02	-12651E+01	-52902E+00	-52902E+00	-57908E+00
-89000E+00	-14539E+01	-90345E-01	-34220E+00	-24854E-01	-10987E-01	-13732E+01	-35474E+00	-35474E+00	-55780E+00
-90000E+00	-14513E+01	-87979E-01	-31790E+00	-31010E-01	-12840E-01	-14780E+01	-18559E+00	-18559E+00	-53715E+00
-91000E+00	-14484E+01	-85633E-01	-29100E+00	-34871E-01	-14151E-01	-15800E+01	-21112E-01	-21112E-01	-51709E+00
-92000E+00	-14454E+01	-83304E-01	-26187E+00	-36613E-01	-14962E-01	-16794E+01	-29550E+00	-29550E+00	-49756E+00
-93000E+00	-14422E+01	-80987E-01	-23082E+00	-36395E-01	-15312E-01	-17765E+01	-44838E+00	-44838E+00	-47852E+00
-94000E+00	-14389E+01	-78678E-01	-19812E+00	-34363E-01	-15233E-01	-18715E+01	-59808E+00	-59808E+00	-45993E+00
-95000E+00	-14354E+01	-76374E-01	-16402E+00	-30649E-01	-14759E-01	-19646E+01	-74492E+00	-74492E+00	-44176E+00
-96000E+00	-14317E+01	-74070E-01	-12814E+00	-25374E-01	-13916E-01	-20560E+01	-89915E+00	-89915E+00	-42397E+00
-97000E+00	-14279E+01	-71763E-01	-92487E-01	-18649E-01	-12731E-01	-21459E+01	-10310E+01	-10310E+01	-40653E+00
-98000E+00	-14240E+01	-69451E-01	-55427E-01	-10573E-01	-11228E-01	-22345E+01	-11708E+01	-11708E+01	-38942E+00
-99000E+00	-14199E+01	-67129E-01	-17717E-01	-12392E-02	-94295E-02	-23218E+01	-13087E+01	-13087E+01	-37260E+00
-10000E+01	-14158E+01	-64793E-01	-20502E-01	-92683E-02	-73540E-02	-24081E+01	-19285E+00	-19285E+00	-35605E+00

THETA= -52360E+00

R									
UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SIFF	SIFF
-88000E+00	-11786E+01	-13557E+00	-28196E+00	-21839E-01	-12497E-01	-13437E+01	-82044E+00	-82044E+00	-53369E+00
-89000E+00	-11768E+01	-13208E+00	-26377E+00	-33485E-01	-16063E-01	-14200E+01	-66385E+00	-66385E+00	-51407E+00
-90000E+00	-11748E+01	-12862E+00	-24310E+00	-41779E-01	-18770E-01	-14942E+01	-51183E+00	-51183E+00	-49504E+00
-91000E+00	-11726E+01	-12519E+00	-22027E+00	-46981E-01	-20687E-01	-15664E+01	-36397E+00	-36397E+00	-47655E+00
-92000E+00	-11703E+01	-12178E+00	-19556E+00	-49328E-01	-21873E-01	-16368E+01	-21991E+00	-21991E+00	-45855E+00
-93000E+00	-11679E+01	-11840E+00	-16924E+00	-49035E-01	-22384E-01	-17056E+01	-79285E-01	-79285E-01	-44100E+00
-94000E+00	-11653E+01	-11502E+00	-14153E+00	-46297E-01	-22270E-01	-17729E+01	-58204E-01	-58204E-01	-42387E+00
-95000E+00	-11626E+01	-11165E+00	-11264E+00	-41293E-01	-21576E-01	-18390E+01	-19285E+00	-19285E+00	-40713E+00

.96000E+00 --.11597E+01  
 .97000E+00 --.11568E+01  
 .98000E+00 --.11537E+01  
 .99000E+00 --.11506E+01  
 .10000E+01 --.11474E+01  
 THETA = .6981E+00

UBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	.60255E+00	.18190E+00	.24835E-01	.16066E-01	-.14400E+01	.11779E+01	.47207E+00
.89000E+00	.58638E+00	.16756E+00	.38078E-01	.20650E-01	-.14775E+01	.10430E+01	.45472E+00
.90000E+00	.57038E+00	.15135E+00	.47509E-01	.24131E-01	-.15104E+01	.91201E+00	.43789E+00
.91000E+00	.55451E+00	.13350E+00	.53425E-01	.26595E-01	-.15497E+01	.78455E+00	.42153E+00
.92000E+00	.53875E+00	.11422E+00	.56094E-01	.28120E-01	-.15845E+01	.66032E+00	.40561E+00
.93000E+00	.52306E+00	.92109E-01	.55760E-01	.28777E-01	-.16186E+01	.53903E+00	.39009E+00
.94000E+00	.50742E+00	.72124E-01	.52647E-01	.28629E-01	-.16521E+01	.42042E+00	.37494E+00
.95000E+00	.49181E+00	.49618E-01	.46957E-01	.27737E-01	-.16851E+01	.30424E+00	.36012E+00
.96000E+00	.47619E+00	.26324E-01	.38875E-01	.26153E-01	-.17176E+01	.19027E+00	.34562E+00
.97000E+00	.46055E+00	.23627E-02	.28571E-01	.23927E-01	-.17496E+01	.78313E-01	.33141E+00
.98000E+00	.44487E+00	.22161E-01	.16199E-01	.21103E-01	-.17814E+01	.31834E-01	.31745E+00
.99000E+00	.42912E+00	.47153E-01	.18986E-02	.17722E-01	-.18128E+01	.14034E+00	.30374E+00
.10000E+01	.41328E+00	.72528E-01	-.14200E-01	.13821E-01	-.18440E+01	.24736E+00	.29025E+00

THETA = .87266E+00

UBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	.60255E+00	.75421E-01	.24835E-01	.19146E-01	-.15425E+01	.15584E+01	.39612E+00
.89000E+00	.58638E+00	.65178E-01	.38078E-01	.24609E-01	-.15387E+01	.14465E+01	.39156E+00
.90000E+00	.57038E+00	.53711E-01	.47509E-01	.28758E-01	-.15352E+01	.13379E+01	.36744E+00
.91000E+00	.55451E+00	.41163E-01	.53425E-01	.31695E-01	-.15319E+01	.12321E+01	.35371E+00
.92000E+00	.53875E+00	.27663E-01	.56094E-01	.33512E-01	-.15288E+01	.11290E+01	.34035E+00
.93000E+00	.52306E+00	.13328E-01	.55760E-01	.34295E-01	-.15260E+01	.10283E+01	.32732E+00
.94000E+00	.50742E+00	.17409E-02	.52647E-01	.34119E-01	-.15235E+01	.92975E+00	.31461E+00
.95000E+00	.49181E+00	.17451E-01	.46957E-01	.33056E-01	-.15212E+01	.83324E+00	.30218E+00
.96000E+00	.47619E+00	.33719E-01	.38875E-01	.31168E-01	-.15191E+01	.73854E+00	.29001E+00
.97000E+00	.46055E+00	.50474E-01	.28571E-01	.28515E-01	-.15173E+01	.64549E+00	.27808E+00
.98000E+00	.44487E+00	.67648E-01	.16199E-01	.25149E-01	-.15150E+01	.55395E+00	.26638E+00
.99000E+00	.42912E+00	.85183E-01	.18986E-02	.21120E-01	-.15144E+01	.46378E+00	.25487E+00
.10000E+01	.41328E+00	.10303E+00	-.14200E-01	.16471E-01	-.15133E+01	.37484E+00	.24355E+00

THETA = .10472E+01

UBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	.52988E+00	.23482E+00	.21839E-01	.21645E-01	-.16388E+01	.19158E+01	.30812E+00
.89000E+00	.51566E+00	.22876E+00	.33485E-01	.27821E-01	-.15962E+01	.18257E+01	.29680E+00
.90000E+00	.50158E+00	.22277E+00	.41779E-01	.32511E-01	-.15550E+01	.17381E+01	.28581E+00
.91000E+00	.48763E+00	.21683E+00	.46981E-01	.35831E-01	-.15152E+01	.16527E+01	.27514E+00
.92000E+00	.47377E+00	.21093E+00	.49328E-01	.37886E-01	-.14765E+01	.15694E+01	.26474E+00
.93000E+00	.45997E+00	.20507E+00	.49035E-01	.38771E-01	-.14391E+01	.14880E+01	.25461E+00
.94000E+00	.44622E+00	.19922E+00	.46297E-01	.38572E-01	-.14026E+01	.14084E+01	.24472E+00
.95000E+00	.43249E+00	.19335E+00	.41293E-01	.37370E-01	-.13672E+01	.13303E+01	.23505E+00
.96000E+00	.41876E+00	.18755E+00	.34187E-01	.35236E-01	-.13327E+01	.12537E+01	.22559E+00
.97000E+00	.40500E+00	.18171E+00	.25125E-01	.32236E-01	-.12990E+01	.11785E+01	.21631E+00
.98000E+00	.39121E+00	.17585E+00	.14245E-01	.28431E-01	-.12662E+01	.11044E+01	.20720E+00
.99000E+00	.37736E+00	.16998E+00	.16696E-02	.23876E-01	-.12340E+01	.10315E+01	.19825E+00
.10000E+01	.36343E+00	.16407E+00	-.12487E-01	.18621E-01	-.12026E+01	.95952E+00	.18945E+00

THETA = .12217E+01

UBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	.39329E+00	.25480E+00	.16210E-01	.23487E-01	-.17174E+01	.22073E+01	.21077E+00
.89000E+00	.38273E+00	.24822E+00	.24854E-01	.30188E-01	-.16431E+01	.21348E+01	.20302E+00
.90000E+00	.37229E+00	.24172E+00	.31010E-01	.35277E-01	-.15712E+01	.20643E+01	.19551E+00
.91000E+00	.36193E+00	.23527E+00	.34871E-01	.38879E-01	-.15015E+01	.19956E+01	.18820E+00



92000E+00	13879E+00	35164E+00	22888E+00	-1199E+00	36613E-01	41109E-01	-14339E+01	19284E+01	18110E+00
93000E+00	13775E+00	34141E+00	22251E+00	-12378E+00	36395E-01	42069E-01	-13682E+01	18628E+01	17417E+00
94000E+00	13670E+00	33120E+00	21617E+00	-12773E+00	34363E-01	41853E-01	-13041E+01	17986E+01	16740E+00
95000E+00	13563E+00	32101E+00	20984E+00	-13185E+00	30649E-01	40549E-01	-12417E+01	17356E+01	16079E+00
96000E+00	13455E+00	31081E+00	20351E+00	-13614E+00	25374E-01	38233E-01	-11807E+01	16737E+01	15431E+00
97000E+00	13345E+00	30060E+00	19717E+00	-14060E+00	18649E-01	34979E-01	-11211E+01	16130E+01	14797E+00
98000E+00	13233E+00	29037E+00	19081E+00	-14524E+00	10573E-01	30850E-01	-10627E+01	15532E+01	14174E+00
99000E+00	13120E+00	28009E+00	18444E+00	-15005E+00	12392E-02	25907E-01	-10054E+01	14942E+01	13561E+00
10000E+01	13005E+00	26975E+00	17842E+00	-15505E+00	92683E-02	20205E-01	-94922E+01	14362E+01	12953E+00

THETA= .13963E+01

R	UBAK	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
-88000E+00	-32404E+00	-20926E+00	-26703E+00	-15944E+00	-86250E-02	-24614E-01	-17686E+01	-23975E+01	-10701E+00
-89000E+00	-32268E+00	-20865E+00	-26014E+00	-16065E+00	-13224E-01	-31637E-01	-16737E+01	-23366E+01	-10303E+00
-90000E+00	-32128E+00	-20809E+00	-25332E+00	-16166E+00	-16500E-01	-36970E-01	-15818E+01	-22772E+01	-99262E-01
-91000E+00	-31983E+00	-19258E+00	-24657E+00	-16251E+00	-18554E-01	-40746E-01	-14926E+01	-22193E+01	-95554E-01
-92000E+00	-31835E+00	-18711E+00	-23986E+00	-16327E+00	-19481E-01	-43082E-01	-14061E+01	-21628E+01	-91945E-01
-93000E+00	-31683E+00	-18166E+00	-23319E+00	-16397E+00	-19365E-01	-44088E-01	-13219E+01	-21074E+01	-88426E-01
-94000E+00	-31528E+00	-17623E+00	-22655E+00	-16467E+00	-18284E-01	-43863E-01	-12398E+01	-20532E+01	-84997E-01
-95000E+00	-31369E+00	-17080E+00	-21991E+00	-16539E+00	-16308E-01	-42496E-01	-111598E+01	-20001E+01	-81634E-01
-96000E+00	-31207E+00	-16538E+00	-21328E+00	-16616E+00	-13501E-01	-40069E-01	-10815E+01	-19479E+01	-78346E-01
-97000E+00	-31041E+00	-15995E+00	-20663E+00	-16702E+00	-99227E-02	-36658E-01	-10049E+01	-18965E+01	-75125E-01
-98000E+00	-30872E+00	-15450E+00	-19997E+00	-16798E+00	-56259E-02	-32331E-01	-92989E+00	-18460E+01	-71961E-01
-99000E+00	-30701E+00	-14903E+00	-19329E+00	-16907E+00	-65939E-03	-27151E-01	-85624E+00	-17963E+01	-68853E-01
-10000E+01	-30525E+00	-14353E+00	-18657E+00	-17030E+00	-49316E-02	-21175E-01	-78387E+00	-14737E+01	-65795E-01

THEYA= .15708E+01

INMETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SIYT	SIFF	SIIF
		.88000F+00	.32681E-13	.27115E+00	-.17793E+00	.13470E-14	.24994E-01	-.17864E+01	.24635E+01	.16458E-13
		.89000E+00	.38549E+00	.26415E+00	-.17843E+00	.20652E-14	.32125E-01	-.16843E+01	.24067E+01	.15853E-13
		.90000E+00	.30936E-13	.25733E+00	-.17861E+00	.26578E-14	.37541E-01	-.15845E+01	.23512E+01	.15260E-13
		.91000E+00	.30075E-13	.25037E+00	-.17854E+00	.28976E-14	.41374E-01	-.14895E+01	.22971E+01	.14696E-13
		.92000E+00	.29220E-13	.24356E+00	-.17830E+00	.30424E-14	.43747E-01	-.13964E+01	.22442E+01	.14141E-13
		.93000E+00	.28370E-13	.23679E+00	-.17793E+00	.30249E-14	.44769E-01	-.13058E+01	.21924E+01	.13600E-13
		.94000E+00	.27521E-13	.23004E+00	-.17749E+00	.28554E-14	.44539E-01	-.12175E+01	.21417E+01	.13071E-13
		.95000E+00	.26674E-13	.22330E+00	-.17703E+00	.25468E-14	.43151E-01	-.11313E+01	.20919E+01	.12555E-13
		.96000E+00	.25827E-13	.21657E+00	-.17659E+00	.21085E-14	.40587E-01	-.10471E+01	.20431E+01	.12049E-13
		.97000E+00	.24979E-13	.20982E+00	-.17619E+00	.15496E-14	.37223E-01	-.96460E+00	.19950E+01	.11554E-13
		.98000E+00	.24128E-13	.20306E+00	-.17588E+00	.87857E-15	.32930E-01	-.88377E+00	.19478E+01	.11067E-13
		.99000E+00	.23274E-13	.19627E+00	-.17567E+00	.10298E-15	.27570E-01	-.80442E+00	.19012E+01	.10589E-13
		.10000E+01	.22415E-13	.18945E+00	-.17560E+00	-.77016E-15	.21502E-01	-.72664E+00	.18553E+01	.10119E-13

THEYA= .17453E+01

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	.32404E+00	-.20926E+00	.26703E+00	-.1594E+00	-.86250E-02	.24614E-01	-.17686E+01	.23975E+01	-.10701E+00
.89000E+00	.32218E+00	-.20365E+00	.26014E+00	-.16065E+00	-.13224E-01	.31637E-01	-.16737E+01	.23366E+01	-.10308E+00
.90000E+00	.32128E+00	-.19809E+00	.25332E+00	-.16166E+00	-.16500E-01	.36970E-01	-.15818E+01	.22772E+01	-.99262E-01
.91000E+00	.31983E+00	-.19258E+00	.24657E+00	-.16251E+00	-.18554E-01	.40746E-01	-.14926E+01	.22193E+01	-.95554E-01
.92000E+00	.31435E+00	-.18711E+00	.23986E+00	-.16327E+00	-.19481E-01	.43082E-01	-.14061E+01	.21628E+01	-.91945E-01
.93000E+00	.31283E+00	-.18166E+00	.23319E+00	-.16397E+00	-.19365E-01	.44088E-01	-.13219E+01	.21074E+01	-.88426E-01
.94000E+00	.31628E+00	-.17623E+00	.22655E+00	-.16467E+00	-.18294E-01	.43863E-01	-.12139E+01	.20532E+01	-.84992E-01
.95000E+00	.31369E+00	-.17080E+00	.21991E+00	-.16539E+00	-.16308E-01	.42496E-01	-.11598E+01	.20001E+01	-.81634E-01
.96000E+00	.31207E+00	-.16538E+00	.21328E+00	-.16616E+00	-.13501E-01	.40069E-01	-.10815E+01	.19479E+01	-.78346E-01
.97000E+00	.31041E+00	-.15995E+00	.20663E+00	-.16702E+00	-.99227E-02	.36658E-01	-.10049E+01	.18965E+01	-.75124E-01
.98000E+00	.30872E+00	-.15450E+00	.19997E+00	-.16798E+00	-.56257E-02	.32331E-01	-.92989E+00	.18460E+01	-.71961E-01
.99000E+00	.30701E+00	-.14903E+00	.19329E+00	-.16907E+00	-.65939E-03	.27151E-01	-.85624E+00	.17963E+01	-.68853E-01
1.0000E+01	.30525E+00	-.14353E+00	.18657E+00	-.17030E+00	-.49316E-02	.21175E-01	-.78387E+00	.17473E+01	-.65795E-01

THEYA= .19199E+01

	R	URAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
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.88000E+00	.14281E+00	-.39329E+00	.25480E+00	-.10620E+00	-.16210E-01	.23487E-01	-.17174E+01	.22073E+01	-.21077E+00
.89000E+00	.14183E+00	-.38273E+00	.24822E+00	-.10946E+00	-.24854E-01	.30198E-01	-.16431E+01	.21349E+01	-.20302E+00
.90000E+00	.14083E+00	-.37229E+00	.24172E+00	-.11284E+00	-.31010E-01	.35277E-01	-.15712E+01	.20643E+01	-.19551E+00
.91000E+00	.13982E+00	-.36193E+00	.23527E+00	-.11634E+00	-.34871E-01	.38879E-01	-.15015E+01	.19956E+01	-.18820E+00
.92000E+00	.13879E+00	-.35164E+00	.22888E+00	-.11999E+00	-.36613E-01	.41109E-01	-.14339E+01	.19284E+01	-.18110E+00
.93000E+00	.13775E+00	-.34141E+00	.22251E+00	-.12378E+00	-.36395E-01	.42069E-01	-.13682E+01	.18628E+01	-.17417E+00
.94000E+00	.13670E+00	-.33120E+00	.21617E+00	-.12773E+00	-.34363E-01	.41853E-01	-.13041E+01	.17986E+01	-.16740E+00
.95000E+00	.13563E+00	-.32101E+00	.20984E+00	-.13185E+00	-.30649E-01	.40549E-01	-.12417E+01	.17356E+01	-.16079E+00
.96000E+00	.13455E+00	-.31081E+00	.20351E+00	-.13614E+00	-.25374E-01	.38233E-01	-.11807E+01	.16737E+01	-.15431E+00
.97000E+00	.13345E+00	-.30060E+00	.19717E+00	-.14060E+00	-.18649E-01	.34979E-01	-.11211E+01	.16130E+01	-.14797E+00
.98000E+00	.13233E+00	-.29037E+00	.19081E+00	-.14524E+00	-.10573E-01	.30850E-01	-.10627E+01	.15532E+01	-.14174E+00
.99000E+00	.13120E+00	-.28009E+00	.18444E+00	-.15005E+00	-.12392E-02	.25907E-01	-.10054E+01	.14942E+01	-.13561E+00
.10000E+01	.13005E+00	-.26975E+00	.17802E+00	-.15505E+00	.92683E-02	.20205E-01	-.94922E+00	.14362E+01	-.12959E+00

FEE= .52360E+00  
THETA= 0.

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.17204E+01	0.	0.	.43525E+00	0.	0.	-.94102E+00	.17686E-01	.83027E+00
.89000E+00	-.16975E+01	0.	0.	.41117E+00	0.	0.	-.10863E+01	-.16277E+00	.79976E+00
.90000E+00	-.16944E+01	0.	0.	.38367E+00	0.	0.	-.12272E+01	-.33789E+00	.77015E+00
.91000E+00	-.16910E+01	0.	0.	.35321E+00	0.	0.	-.13642E+01	-.50815E+00	.74138E+00
.92000E+00	-.16873E+01	0.	0.	.32018E+00	0.	0.	-.14977E+01	-.67400E+00	.71338E+00
.93000E+00	-.16835E+01	0.	0.	.28497E+00	0.	0.	-.16281E+01	-.83585E+00	.68608E+00
.94000E+00	-.16795E+01	0.	0.	.24788E+00	0.	0.	-.17555E+01	-.99407E+00	.65943E+00
.95000E+00	-.16753E+01	0.	0.	.20920E+00	0.	0.	-.18804E+01	-.11490E+01	.63338E+00
.96000E+00	-.16709E+01	0.	0.	.16919E+00	0.	0.	-.20029E+01	-.13010E+01	.60787E+00
.97000E+00	-.16663E+01	0.	0.	.12808E+00	0.	0.	-.21233E+01	-.14503E+01	.58287E+00
.98000E+00	-.16616E+01	0.	0.	.86065E-01	0.	0.	-.22419E+01	-.15972E+01	.55833E+00
.99000E+00	-.16568E+01	0.	0.	.43337E-01	0.	0.	-.23587E+01	-.17419E+01	.53421E+00
.10000E+01	-.16519E+01	0.	0.	.43952E-04	0.	0.	-.24741E+01	-.18846E+01	.51049E+00

THETA= .17453E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.16318E+01	.22846E+00	.63437E-01	.41722E+00	.10394E-01	.58475E-02	-.95986E+00	.90402E-01	.81765E+00
.89000E+00	-.16290E+01	.22235E+00	.61800E-01	.39392E+00	.15498E-01	.75158E-02	-.10972E+01	-.85665E-01	.78761E+00
.90000E+00	-.16260E+01	.21630E+00	.60181E-01	.36733E+00	.19157E-01	.87829E-02	-.12306E+01	-.25652E+00	.75845E+00
.91000E+00	-.16228E+01	.21030E+00	.58576E-01	.33788E+00	.21483E-01	.96798E-02	-.13602E+01	-.42265E+00	.73012E+00
.92000E+00	-.16193E+01	.20435E+00	.56983E-01	.30596E+00	.22578E-01	.10235E-01	-.14866E+01	-.58448E+00	.70254E+00
.93000E+00	-.16157E+01	.19842E+00	.55398E-01	.27193E+00	.22534E-01	.10474E-01	-.16099E+01	-.74242E-00	.67566E+00
.94000E+00	-.16118E+01	.19251E+00	.53819E-01	.23608E+00	.21347E-01	.10420E-01	-.17305E+01	-.89681E+00	.64941E+00
.95000E+00	-.16078E+01	.18661E+00	.52243E-01	.19871E+00	.19362E-01	.10095E-01	-.18486E+01	-.10480E+01	.62375E+00
.96000E+00	-.16036E+01	.18071E+00	.50667E-01	.16004E+00	.16381E-01	.95190E-02	-.19646E+01	-.11963E+01	.59864E+00
.97000E+00	-.15993E+01	.17480E+00	.49089E-01	.12031E+00	.12557E-01	.87096E-02	-.20786E+01	-.13420E+01	.57401E+00
.98000E+00	-.15948E+01	.16887E+00	.47507E-01	.79711E-01	.79494E-01	.76807E-02	-.21908E+01	-.14853E+01	.54985E+00
.99000E+00	-.15902E+01	.16292E+00	.45919E-01	.38409E-01	.26108E-02	.64501E-02	-.23015E+01	-.16266E+01	.52610E+00
.10000E+01	-.15854E+01	.15694E+00	.44323E-01	-.34381E-02	-.34097E-02	.50304E-02	-.24107E+01	-.17659E+01	.50273E+00

THETA= .34907E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.14341E+01	.42936E+00	.12495E+00	.36531E+00	.19534E-01	.11517E-01	-.10141E+01	.29978E+00	.78020E+00
.89000E+00	-.14318E+01	.41787E+00	.12172E+00	.34426E+00	.29127E-01	.14803E-01	-.11289E+01	.13636E+00	.75153E+00
.90000E+00	-.14292E+01	.40651E+00	.11853E+00	.32028E+00	.36003E-01	.17299E-01	-.12403E+01	-.22244E-01	.72371E+00
.91000E+00	-.14264E+01	.39524E+00	.11537E+00	.29374E+00	.40374E-01	.19065E-01	-.13487E+01	-.17648E+00	.69667E+00
.92000E+00	-.14234E+01	.38404E+00	.11224E+00	.26500E+00	.42432E-01	.20159E-01	-.14543E+01	-.32674E+00	.67036E+00
.93000E+00	-.14203E+01	.37290E+00	.10911E+00	.23437E+00	.42350E-01	.20629E-01	-.15575E+01	-.47339E+00	.64470E+00
.94000E+00	-.14169E+01	.36180E+00	.10600E+00	.20212E+00	.40288E-01	.20524E-01	-.16584E+01	-.61677E+00	.61966E+00
.95000E+00	-.14135E+01	.35071E+00	.10290E+00	.16849E+00	.36389E-01	.19884E-01	-.17573E+01	-.75719E+00	.59518E+00
.96000E+00	-.14099E+01	.33962E+00	.99794E-01	.13370E+00	.30786E-01	.18749E-01	-.18544E+01	-.89493E+00	.57121E+00
.97000E+00	-.14061E+01	.32851E+00	.96686E-01	.97948E-01	.23600E-01	.17153E-01	-.19498E+01	-.10302E+01	.54772E+00
.98000E+00	-.14022E+01	.31738E+00	.93570E-01	.61403E-01	.14940E-01	.15128E-01	-.20438E+01	-.11634E+01	.52466E+00
.99000E+00	-.13982E+01	.30619E+00	.90443E-01	.24221E-01	.49066E-02	.12704E-01	-.21365E+01	-.12945E+01	.50200E+00
.10000E+01	-.13941E+01	.29495E+00	.87299E-01	-.13464E-01	-.64081E-02	.99080E-02	-.22281E+01	-.14239E+01	.4790E+00

THETA= .52360E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.11313E+01	.57847E+00	.18266E+00	.28578E+00	.26319E-01	.16837E-01	-.10972E+01	.62056E+00	.71903E+00
.89000E+00	-.11296E+01	.56300E+00	.17795E+00	.26818E+00	.39243E-01	.21641E-01	-.11774E+01	.47653E+00	.69261E+00
.90000E+00	-.11277E+01	.54769E+00	.17328E+00	.24819E+00	.48507E-01	.25289E-01	-.12553E+01	.33663E+00	.66697E+00
.91000E+00	-.11256E+01	.53250E+00	.16866E+00	.22612E+00	.54396E-01	.27872E-01	-.13311E+01	.20068E+00	.64206E+00
.92000E+00	-.11233E+01	.51742E+00	.16408E+00	.20226E+00	.57168E-01	.29470E-01	-.14050E+01	.68152E-01	.61780E+00
.93000E+00	-.11209E+01	.50241E+00	.15951E+00	.17684E+00	.57058E-01	.30158E-01	-.14772E+01	-.61221E-01	.59416E+00
.94000E+00	-.11184E+01	.48745E+00	.15497E+00	.15008E+00	.54279E-01	.30004E-01	-.15480E+01	-.18772E+00	.57108E+00
.95000E+00	-.11158E+01	.47251E+00	.15043E+00	.12219E+00	.49027E-01	.29069E-01	-.16173E+01	-.31163E+00	.54852E+00

.96000E+00 -.11130E+01  
 .97000E+00 -.11102E+01  
 .98000E+00 -.11072E+01  
 .99000E+00 -.11042E+01  
 .10000E+01 -.11010E+01  
 THETA= .9813E+00

.88000E+00 -.75992E+00  
 .89000E+00 -.75991E+00  
 .90000E+00 -.7578E+00  
 .91000E+00 -.75654E+00  
 .92000E+00 -.75519E+00  
 .93000E+00 -.75375E+00  
 .94000E+00 -.75222E+00  
 .95000E+00 -.75061E+00  
 .96000E+00 -.74893E+00  
 .97000E+00 -.74717E+00  
 .98000E+00 -.74535E+00  
 .99000E+00 -.74347E+00  
 .10000E+01 -.74153E+00  
 THETA= .87266E+00

.88000E+00 -.36465E+00  
 .89000E+00 -.36443E+00  
 .90000E+00 -.36415E+00  
 .91000E+00 -.36382E+00  
 .92000E+00 -.36343E+00  
 .93000E+00 -.36300E+00  
 .94000E+00 -.36252E+00  
 .95000E+00 -.36201E+00  
 .96000E+00 -.36145E+00  
 .97000E+00 -.36087E+00  
 .98000E+00 -.36026E+00  
 .99000E+00 -.35962E+00  
 .10000E+01 -.35895E+00  
 THETA= .10472E+01

.88000E+00 .67848E-02  
 .89000E+00 .62567E-02  
 .90000E+00 .57347E-02  
 .91000E+00 .52171E-02  
 .92000E+00 .47026E-02  
 .93000E+00 .41900E-02  
 .94000E+00 .36779E-02  
 .95000E+00 .31654E-02  
 .96000E+00 .26514E-02  
 .97000E+00 .21348E-02  
 .98000E+00 .16149E-02  
 .99000E+00 .10907E-02  
 .10000E+01 .56149E-03  
 THETA= .12217E+01

.88000E+00 .30958E+00  
 .89000E+00 .30845E+00  
 .90000E+00 .30727E+00  
 .91000E+00 .30606E+00

.14589E+00 .93342E-01  
 .14135E+00 .63683E-01  
 .13679E+00 .33355E-01  
 .13222E+00 .24827E-02  
 .12762E+00 .28825E-01  
 .12348E+00 .18822E+00  
 .11922E+00 .17484E+00  
 .11506E+00 .15976E+00  
 .11083E+00 .14317E+00  
 .10663E+00 .12528E+00  
 .10243E+00 .10626E+00  
 .9813E+00 .86254E-01  
 .9407E+00 .65405E-01  
 .9000E+00 .43834E-01  
 .8600E+00 .21650E-01  
 .8200E+00 .10512E-02  
 .7800E+00 .24183E-01  
 .7400E+00 .47668E-01  
 .7000E+00 .29929E-01  
 .6600E+00 .44625E-01  
 .6200E+00 .55160E-01  
 .5800E+00 .61831E-01  
 .5400E+00 .65003E-01  
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 .4600E+00 .61724E-01  
 .4200E+00 .55751E-01  
 .3800E+00 .47168E-01  
 .3400E+00 .36157E-01  
 .3000E+00 .22889E-01  
 .2600E+00 .75174E-02  
 .2200E+00 .98178E-02  
 .1800E+00 .29929E-01  
 .1400E+00 .44625E-01  
 .1000E+00 .55160E-01  
 .0600E+00 .61831E-01  
 .0200E+00 .65003E-01  
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 .0000E+00 .61724E-01  
 .0000E+00 .55751E-01  
 .0000E+00 .47168E-01  
 .0000E+00 .36157E-01  
 .0000E+00 .22889E-01  
 .0000E+00 .75174E-02  
 .0000E+00 .98178E-02

.27409E-01 -.16854E+01  
 .25076E-01 -.17525E+01  
 .22116E-01 -.18146E+01  
 .18572E-01 -.19438E+01  
 .14485E-01 -.19483E+01  
 .21645E-01 -.11991E+01  
 .27821E-01 -.12369E+01  
 .32511E-01 -.12736E+01  
 .35831E-01 -.13095E+01  
 .37886E-01 -.13445E+01  
 .38771E-01 -.13788E+01  
 .38572E-01 -.14125E+01  
 .37370E-01 -.14456E+01  
 .35236E-01 -.14782E+01  
 .32236E-01 -.15105E+01  
 .28431E-01 -.15423E+01  
 .23876E-01 -.15739E+01  
 .18621E-01 -.16051E+01  
 .25796E-01 -.13076E+01  
 .33156E-01 -.13002E+01  
 .38745E-01 -.12931E+01  
 .42702E-01 -.12864E+01  
 .45151E-01 -.12801E+01  
 .46205E-01 -.12740E+01  
 .45969E-01 -.12683E+01  
 .44536E-01 -.12629E+01  
 .41993E-01 -.12577E+01  
 .38418E-01 -.12529E+01  
 .33883E-01 -.12483E+01  
 .28455E-01 -.12440E+01  
 .22192E-01 -.12399E+01  
 .29163E-01 -.14095E+01  
 .37483E-01 -.13597E+01  
 .43802E-01 -.13115E+01  
 .48275E-01 -.12648E+01  
 .51044E-01 -.12196E+01  
 .52235E-01 -.11756E+01  
 .51968E-01 -.11328E+01  
 .50348E-01 -.10912E+01  
 .47473E-01 -.10505E+01  
 .43432E-01 -.10109E+01  
 .38306E-01 -.97205E+00  
 .32168E-01 -.93404E+00  
 .25088E-01 -.89677E+00  
 .31643E-01 -.14926E+01  
 .40672E-01 -.14082E+01  
 .47528E-01 -.13264E+01  
 .52382E-01 -.12472E+01

.29163E-01 -.14095E+01  
 .37483E-01 -.13597E+01  
 .43802E-01 -.13115E+01  
 .48275E-01 -.12648E+01  
 .51044E-01 -.12196E+01  
 .52235E-01 -.11756E+01  
 .51968E-01 -.11328E+01  
 .50348E-01 -.10912E+01  
 .47473E-01 -.10505E+01  
 .43432E-01 -.10109E+01  
 .38306E-01 -.97205E+00  
 .32168E-01 -.93404E+00  
 .25088E-01 -.89677E+00  
 .31643E-01 -.14926E+01  
 .40672E-01 -.14082E+01  
 .47528E-01 -.13264E+01  
 .52382E-01 -.12472E+01

.31643E-01 -.14926E+01  
 .40672E-01 -.14082E+01  
 .47528E-01 -.13264E+01  
 .52382E-01 -.12472E+01

.92000E+00 .30481E+00 .38404E+00 .30836E+00 .42432E-01 .55385E-01 .19473E+01 .24399E+00  
 .93000E+00 .30352E+00 .37290E+00 .29979E+00 .42350E-01 .56679E-01 .19002E+01 .23465E+00  
 .94000E+00 .30221E+00 .36180E+00 .29124E+00 .40288E-01 .56389E-01 .18540E+01 .22554E+00  
 .95000E+00 .30086E+00 .35071E+00 .28271E+00 .36389E-01 .54631E-01 .18087E+01 .21663E+00  
 .96000E+00 .29947E+00 .33962E+00 .27418E+00 .30786E-01 .51512E-01 .17642E+01 .20790E+00  
 .97000E+00 .29806E+00 .32851E+00 .26564E+00 .23600E-01 .47127E-01 .17205E+01 .19935E+00  
 .98000E+00 .29662E+00 .31738E+00 .25708E+00 .14940E-01 .41564E-01 .16774E+01 .19096E+00  
 .99000E+00 .29514E+00 .30619E+00 .24849E+00 .34905E-01 .39052E-01 .16350E+01 .18271E+00  
 .10000E+01 .29344E+00 .29495E+00 .23985E+00 .27222E-01 .27222E-01 .15932E+01 .17460E+00  
 THETA= .13963E+01

.8P000E+00 .50721E+00 .22846E+00 .35977E+00 .10394E-01 .33163E-01 .23565E+01 .14417E+00  
 .89000E+00 .50568E+00 .22235E+00 .35048E+00 .15498E-01 .42624E-01 .23173E+01 .13888E+00  
 .90000E+00 .50409E+00 .21630E+00 .34130E+00 .19157E-01 .49810E-01 .22791E+01 .13374E+00  
 .91000E+00 .50242E+00 .21030E+00 .33220E+00 .21483E-01 .54897E-01 .22417E+01 .12874E+00  
 .92000E+00 .50069E+00 .20435E+00 .32317E+00 .22578E-01 .58045E-01 .22051E+01 .12384E+00  
 .93000E+00 .49890E+00 .19842E+00 .31418E+00 .22534E-01 .59400E-01 .21692E+01 .11914E+00  
 .94000E+00 .49706E+00 .19251E+00 .30522E+00 .21437E-01 .59096E-01 .21341E+01 .11451E+00  
 .95000E+00 .49516E+00 .18661E+00 .29628E+00 .19362E-01 .57254E-01 .20995E+01 .10998E+00  
 .96000E+00 .49321E+00 .18071E+00 .28735E+00 .16381E-01 .53985E-01 .20656E+01 .10556E+00  
 .97000E+00 .49121E+00 .17480E+00 .27840E+00 .12557E-01 .49389E-01 .20323E+01 .10121E+00  
 .98000E+00 .48916E+00 .16887E+00 .26943E+00 .79494E-02 .43560E-01 .19994E+01 .96953E-01  
 .99000E+00 .48707E+00 .16292E+00 .26042E+00 .26108E-02 .36580E-01 .19671E+01 .92765E-01  
 .10000E+01 .48493E+00 .15694E+00 .25137E+00 .28529E-01 .28529E-01 .19352E+01 .88645E-01  
 THETA= .15708E+01

.88000E+00 .57585E+00 .35078E-13 .36532E+00 .16232E-14 .33674E-01 .24292E+01 .22174E-13  
 .89000E+00 .57419E+00 .34724E-13 .35589E+00 .24203E-14 .43282E-01 .23944E+01 .21359E-13  
 .90000E+00 .57244E+00 .33779E-13 .34657E+00 .29917E-14 .50579E-01 .23604E+01 .20568E-13  
 .91000E+00 .57061E+00 .32843E-13 .33733E+00 .33550E-14 .55744E-01 .23272E+01 .19800E-13  
 .92000E+00 .56872E+00 .31913E-13 .32815E+00 .35259E-14 .58940E-01 .22946E+01 .19052E-13  
 .93000E+00 .56675E+00 .30987E-13 .31903E+00 .35191E-14 .60316E-01 .22627E+01 .18323E-13  
 .94000E+00 .56473E+00 .30064E-13 .30983E+00 .34777E-14 .60008E-01 .22313E+01 .17611E-13  
 .95000E+00 .56264E+00 .29143E-13 .30085E+00 .30238E-14 .58137E-01 .22005E+01 .16915E-13  
 .96000E+00 .56049E+00 .28221E-13 .29178E+00 .25582E-14 .54818E-01 .21703E+01 .16234E-13  
 .97000E+00 .55829E+00 .27298E-13 .28269E+00 .21961E-14 .50151E-01 .21405E+01 .15566E-13  
 .98000E+00 .55603E+00 .26373E-13 .27358E+00 .12415E-14 .44232E-01 .21112E+01 .14911E-13  
 .99000E+00 .55373E+00 .25444E-13 .26444E+00 .40772E-15 .37145E-01 .20824E+01 .14267E-13  
 .10000E+01 .55137E+00 .24509E-13 .25524E+00 .53249E-15 .28969E-01 .20539E+01 .13633E-13  
 THETA= .17453E+01

.88000E+00 .50721E+00 .22846E+00 .35977E+00 .10394E-01 .33163E-01 .23565E+01 .14417E+00  
 .89000E+00 .50568E+00 .22235E+00 .35048E+00 .15498E-01 .42624E-01 .23173E+01 .13888E+00  
 .90000E+00 .50409E+00 .21630E+00 .34130E+00 .19157E-01 .49810E-01 .22791E+01 .13374E+00  
 .91000E+00 .50242E+00 .21030E+00 .33220E+00 .21483E-01 .54897E-01 .22417E+01 .12874E+00  
 .92000E+00 .50069E+00 .20435E+00 .32317E+00 .22578E-01 .58045E-01 .22051E+01 .12384E+00  
 .93000E+00 .49890E+00 .19842E+00 .31418E+00 .22534E-01 .59400E-01 .21341E+01 .11914E+00  
 .94000E+00 .49706E+00 .19251E+00 .30522E+00 .21437E-01 .59096E-01 .21692E+01 .11451E+00  
 .95000E+00 .49516E+00 .18661E+00 .29628E+00 .19362E-01 .57254E-01 .20995E+01 .10998E+00  
 .96000E+00 .49321E+00 .18071E+00 .28735E+00 .16381E-01 .53985E-01 .20656E+01 .10556E+00  
 .97000E+00 .49121E+00 .17480E+00 .27840E+00 .12557E-01 .49389E-01 .20323E+01 .10121E+00  
 .98000E+00 .48916E+00 .16887E+00 .26943E+00 .79494E-02 .43560E-01 .19994E+01 .96953E-01  
 .99000E+00 .48707E+00 .16292E+00 .26042E+00 .26108E-02 .36580E-01 .19671E+01 .92765E-01  
 .10000E+01 .48493E+00 .15694E+00 .25137E+00 .28529E-01 .28529E-01 .19352E+01 .88645E-01  
 THETA= .19199E+01

.88000E+00 .50721E+00 .22846E+00 .35977E+00 .10394E-01 .33163E-01 .23565E+01 .14417E+00  
 .89000E+00 .50568E+00 .22235E+00 .35048E+00 .15498E-01 .42624E-01 .23173E+01 .13888E+00  
 .90000E+00 .50409E+00 .21630E+00 .34130E+00 .19157E-01 .49810E-01 .22791E+01 .13374E+00  
 .91000E+00 .50242E+00 .21030E+00 .33220E+00 .21483E-01 .54897E-01 .22417E+01 .12874E+00  
 .92000E+00 .50069E+00 .20435E+00 .32317E+00 .22578E-01 .58045E-01 .22051E+01 .12384E+00  
 .93000E+00 .49890E+00 .19842E+00 .31418E+00 .22534E-01 .59400E-01 .21341E+01 .11914E+00  
 .94000E+00 .49706E+00 .19251E+00 .30522E+00 .21437E-01 .59096E-01 .21692E+01 .11451E+00  
 .95000E+00 .49516E+00 .18661E+00 .29628E+00 .19362E-01 .57254E-01 .20995E+01 .10998E+00  
 .96000E+00 .49321E+00 .18071E+00 .28735E+00 .16381E-01 .53985E-01 .20656E+01 .10556E+00  
 .97000E+00 .49121E+00 .17480E+00 .27840E+00 .12557E-01 .49389E-01 .20323E+01 .10121E+00  
 .98000E+00 .48916E+00 .16887E+00 .26943E+00 .79494E-02 .43560E-01 .19994E+01 .96953E-01  
 .99000E+00 .48707E+00 .16292E+00 .26042E+00 .26108E-02 .36580E-01 .19671E+01 .92765E-01  
 .10000E+01 .48493E+00 .15694E+00 .25137E+00 .28529E-01 .28529E-01 .19352E+01 .88645E-01  
 THETA= .19199E+01

.88000E+00	.30958E+00	-.42936E+00	.34329E+00	-.92701E-01	-.19534E-01	.31643E-01	-.14926E+01	.21471E+01	-.28397E+00
.89000E+00	.30845E+00	-.41787E+00	.33443E+00	-.93896E-01	-.29127E-01	.40672E-01	-.14082E+01	.20953E+01	-.27353E+00
.90000E+00	.30727E+00	-.40651E+00	.32567E+00	-.94866E-01	-.36003E-01	.47528E-01	-.13264E+01	.20448E+01	-.26341E+00
.91000E+00	.30606E+00	-.39524E+00	.31699E+00	-.95668E-01	-.40374E-01	.52382E-01	-.12472E+01	.19955E+01	-.25357E+00
.92000E+00	.30481E+00	-.38404E+00	.30836E+00	-.96352E-01	-.42432E-01	.55385E-01	-.11702E+01	.19473E+01	-.24399E+00
.93000E+00	.30357E+00	-.37290E+00	.29979E+00	-.96962E-01	-.42350E-01	.56679E-01	-.10953E+01	.19002E+01	-.23465E+00
.94000E+00	.30221E+00	-.36180E+00	.29124E+00	-.97537E-01	-.40288E-01	.56389E-01	-.10224E+01	.18540E+01	-.22554E+00
.95000E+00	.30086E+00	-.35071E+00	.28271E+00	-.98112E-01	-.36389E-01	.54631E-01	-.95120E+00	.18087E+01	-.21663E+00
.96000E+00	.29947E+00	-.33962E+00	.27418E+00	-.98717E-01	-.30786E-01	.51512E-01	-.88163E+00	.17642E+01	-.20790E+00
.97000E+00	.29806E+00	-.32851E+00	.26564E+00	-.99379E-01	-.23600E-01	.47127E-01	-.81355E+00	.17205E+01	-.19935E+00
.98000E+00	.29662E+00	-.31738E+00	.25708E+00	-.10012E+00	-.14940E-01	.41564E-01	-.74683E+00	.16774E+01	-.19096E+00
.99000E+00	.29514E+00	-.30619E+00	.24849E+00	-.10096E+00	-.49066E-02	.34905E-01	-.68135E+00	.16350E+01	-.18271E+00
.10000E+01	.29364E+00	-.29495E+00	.23985E+00	-.10192E+00	.64081E-02	.27222E-01	-.61701E+00	.15932E+01	-.17460E+00

FEE= .69813E+00  
THETA= 0.

R		URAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIEF	SITF
.88000E+00	-.17004E+01	0.	0.	0.	.43525E+00	0.	0.	-.62815E+00	-.29519E+00	.94415E+00
.89000E+00	-.16975E+01	0.	0.	0.	.41117E+00	0.	0.	-.78487E+00	-.46415E+00	.90945E+00
.90000E+00	-.16944E+01	0.	0.	0.	.38367E+00	0.	0.	-.93696E+00	-.62811E+00	.87578E+00
.91000E+00	-.16910E+01	0.	0.	0.	.35321E+00	0.	0.	-.10848E+01	-.78753E+00	.84307E+00
.92000E+00	-.16873E+01	0.	0.	0.	.32018E+00	0.	0.	-.12289E+01	-.94283E+00	.81122E+00
.93000E+00	-.16835E+01	0.	0.	0.	.28497E+00	0.	0.	-.13695E+01	-.10944E+01	.78018E+00
.94000E+00	-.16795E+01	0.	0.	0.	.24788E+00	0.	0.	-.15070E+01	-.12426E+01	.74988E+00
.95000E+00	-.16753E+01	0.	0.	0.	.20920E+00	0.	0.	-.16417E+01	-.13877E+01	.72025E+00
.96000E+00	-.16709E+01	0.	0.	0.	.16919E+00	0.	0.	-.17738E+01	-.15301E+01	.69125E+00
.97000E+00	-.16663E+01	0.	0.	0.	.12808E+00	0.	0.	-.19037E+01	-.16699E+01	.66281E+00
.98000E+00	-.16616E+01	0.	0.	0.	.86069E-01	0.	0.	-.20315E+01	-.18076E+01	.63491E+00
.99000E+00	-.16568E+01	0.	0.	0.	.43337E-01	0.	0.	-.21574E+01	-.19432E+01	.60749E+00
.10000E+01	-.16519E+01	0.	0.	0.	.43952E-04	0.	0.	-.22817E+01	-.20770E+01	.58051E+00

THETA= -.17453E+00

R		URAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIEF	SITF
.88000E+00	-.16248E+01	.25200E+00	.72138E-01	.41779E+00	.12564E-01	.66495E-02	.66495E-02	-.64025E+00	-.21431E+00	.92980E+00
.89000E+00	-.16220E+01	.24528E+00	.70276E-01	.39458E+00	.18287E-01	.85467E-02	.85467E-02	-.79632E+00	-.37841E+00	.89563E+00
.90000E+00	-.16191E+01	.23863E+00	.68435E-01	.36808E+00	.22416E-01	.99875E-02	.99875E-02	-.94001E+00	-.53765E+00	.86249E+00
.91000E+00	-.16158E+01	.23204E+00	.66611E-01	.33874E+00	.25075E-01	.11007E-01	.11007E-01	-.10797E+01	-.69249E+00	.83026E+00
.92000E+00	-.16124E+01	.22549E+00	.64799E-01	.30695E+00	.26376E-01	.11639E-01	.11639E-01	-.12159E+01	-.84334E+00	.79890E+00
.93000E+00	-.16087E+01	.21898E+00	.62997E-01	.27305E+00	.26421E-01	.11910E-01	.11910E-01	-.13487E+01	-.99056E+00	.76833E+00
.94000E+00	-.16049E+01	.21248E+00	.61201E-01	.23735E+00	.23040E-01	.11849E-01	.11849E-01	-.14787E+01	-.11345E+01	.73848E+00
.95000E+00	-.16009E+01	.20600E+00	.59408E-01	.20012E+00	.23109E-01	.11480E-01	.11480E-01	-.16059E+01	-.12755E+01	.70931E+00
.96000E+00	-.15967E+01	.19951E+00	.57616E-01	.16161E+00	.19914E-01	.10825E-01	.10825E-01	-.17308E+01	-.14138E+01	.68074E+00
.97000E+00	-.15924E+01	.19302E+00	.55822E-01	.12204E+00	.15789E-01	.99031E-02	.99031E-02	-.18536E+01	-.15497E+01	.65275E+00
.98000E+00	-.15879E+01	.18650E+00	.54023E-01	.81601E-01	.10800E-01	.87342E-02	.87342E-02	-.19744E+01	-.16834E+01	.62526E+00
.99000E+00	-.15833E+01	.17996E+00	.52217E-01	.40465E-01	.50045E-02	.73348E-02	.73348E-02	-.20934E+01	-.18151E+01	.59826E+00
.10000E+01	-.15786E+01	.17339E+00	.50402E-01	-.12126E-02	-.15428E-02	.57204E-02	.57204E-02	-.22110E+01	-.19451E+01	.57169E+00

THETA= .34907E+00

R		URAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIEF	SITF
.88000E+00	-.14070E+01	.47360E+00	.14208E+00	.36751E+00	.23613E-01	.13097E-01	.13097E-01	-.70615E+00	-.18575E-01	.88721E+00
.89000E+00	-.14047E+01	.46098E+00	.13842E+00	.34679E+00	.34369E-01	.16834E-01	.16834E-01	-.82927E+00	-.13152E+00	.85466E+00
.90000E+00	-.14022E+01	.44848E+00	.13479E+00	.32320E+00	.42129E-01	.19672E-01	.19672E-01	-.94878E+00	-.27719E+00	.82297E+00
.91000E+00	-.13994E+01	.43609E+00	.13120E+00	.29710E+00	.47126E-01	.21680E-01	.21680E-01	-.10650E+01	-.41886E+00	.79222E+00
.92000E+00	-.13965E+01	.42379E+00	.12763E+00	.26885E+00	.49570E-01	.22924E-01	.22924E-01	-.11783E+01	-.55688E+00	.76230E+00
.93000E+00	-.13933E+01	.41154E+00	.12408E+00	.23873E+00	.49655E-01	.23459E-01	.23459E-01	-.12889E+01	-.69161E+00	.73313E+00
.94000E+00	-.13901E+01	.39934E+00	.12054E+00	.20703E+00	.47555E-01	.23339E-01	.23339E-01	-.13970E+01	-.82334E+00	.70465E+00
.95000E+00	-.13866E+01	.38715E+00	.11701E+00	.17397E+00	.43430E-01	.22611E-01	.22611E-01	-.15030E+01	-.95236E+00	.67681E+00
.96000E+00	-.13831E+01	.37496E+00	.11348E+00	.13978E+00	.37426E-01	.21320E-01	.21320E-01	-.16070E+01	-.10789E+01	.64956E+00
.97000E+00	-.13794E+01	.36275E+00	.10995E+00	.10465E+00	.34674E-01	.19505E-01	.19505E-01	-.17093E+01	-.12033E+01	.62284E+00
.98000E+00	-.13755E+01	.35051E+00	.10640E+00	.68735E-01	.20297E-01	.17203E-01	.17203E-01	-.18100E+01	-.13257E+01	.59662E+00
.99000E+00	-.13716E+01	.33822E+00	.10295E+00	.32198E-01	.94054E-02	.14447E-01	.14447E-01	-.19092E+01	-.14463E+01	.57085E+00
.10000E+01	-.13675E+01	.32586E+00	.99272E-01	-.48305E-02	-.28996E-02	.11267E-01	.11267E-01	-.20072E+01	-.15653E+01	.54550E+00

THETA= .52360E+00

R		URAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIEF	SITF
.88000E+00	-.10734E+01	.63808E+00	.20771E+00	.29047E+00	.31813E-01	.19146E-01	.19146E-01	-.79485E+00	.37538E+00	.81765E+00
.89000E+00	-.10717E+01	.62107E+00	.20235E+00	.27358E+00	.46305E-01	.24609E-01	.24609E-01	-.87976E+00	.24675E+00	.78761E+00
.90000E+00	-.10699E+01	.60424E+00	.19705E+00	.25443E+00	.56760E-01	.28758E-01	.28758E-01	-.96222E+00	.12186E+00	.75855E+00
.91000E+00	-.10678E+01	.58755E+00	.19180E+00	.23330E+00	.63492E-01	.31695E-01	.31695E-01	-.10425E+01	.38413E-03	.73012E+00
.92000E+00	-.10657E+01	.57097E+00	.18658E+00	.21046E+00	.66786E-01	.33512E-01	.33512E-01	-.11207E+01	-.11800E+00	.70254E+00
.93000E+00	-.10634E+01	.55447E+00	.18139E+00	.18615E+00	.66900E-01	.34295E-01	.34295E-01	-.11971E+01	-.23358E+00	.67566E+00
.94000E+00	-.10609E+01	.53802E+00	.17622E+00	.16057E+00	.64071E-01	.34119E-01	.34119E-01	-.12720E+01	-.34660E+00	.64941E+00
.95000E+00	-.10584E+01	.52160E+00	.17106E+00	.13391E+00	.58513E-01	.33056E-01	.33056E-01	-.13453E+01	-.45732E+00	.62375E+00



.96000E+00 -.10558E+01  
 .97000E+00 -.10530E+01  
 .98000E+00 -.10502E+01  
 .99000E+00 -.10472E+01  
 .10000E+01 -.10442E+01  
 THETA= .69813E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.66419E+00	.72560E+00	.26703E+00	.19597E+00	.36177E-01	.24614E-01	-.90365E+00	.81306E+00	.72326E+00
.89000E+00	-.66328E+00	.70626E+00	.26014E+00	.18378E+00	.52656E-01	.31637E-01	-.94170E+00	.71075E+00	.69668E+00
.90000E+00	-.66225E+00	.68711E+00	.25332E+00	.17007E+00	.64546E-01	.36970E-01	-.97871E+00	.61137E+00	.67089E+00
.91000E+00	-.66112E+00	.66813E+00	.24657E+00	.15504E+00	.72201E-01	.40746E-01	-.10148E+01	.51466E+00	.64583E+00
.92000E+00	-.65990E+00	.64928E+00	.23586E+00	.13885E+00	.75946E-01	.43082E-01	-.10501E+01	.42037E+00	.62143E+00
.93000E+00	-.65860E+00	.63052E+00	.23315E+00	.12165E+00	.76076E-01	.44038E-01	-.10846E+01	.32828E+00	.59765E+00
.94000E+00	-.65723E+00	.61182E+00	.22655E+00	.10359E+00	.72859E-01	.43463E-01	-.11185E+01	.23820E+00	.57444E+00
.95000E+00	-.65578E+00	.59314E+00	.21991E+00	.84771E-01	.66539E-01	.42496E-01	-.11519E+01	.17993E+00	.55174E+00
.96000E+00	-.65426E+00	.57447E+00	.21328E+00	.65313E-01	.57339E-01	.40049E-01	-.11847E+01	.63322E-01	.52952E+00
.97000E+00	-.65269E+00	.55577E+00	.20663E+00	.45309E-01	.45463E-01	.36658E-01	-.12171E+01	-.21793E-01	.50775E+00
.98000E+00	-.65106E+00	.53701E+00	.19997E+00	.24844E-01	.31097E-01	.32331E-01	-.12491E+01	.10556E+00	.48637E+00
.99000E+00	-.64937E+00	.51818E+00	.19329E+00	.39939E-02	.14410E-01	.27151E-01	-.12807E+01	-.18810E+00	.46536E+00
.10000E+01	-.64766E+00	.49925E+00	.18657E+00	-.17173E-01	-.44424E-02	.21175E-01	-.13121E+01	-.26954E+00	.44469E+00

THETA= .87266E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.22869E+00	.72550E+00	.31823E+00	.95403E-01	.36177E-01	.29334E-01	-.10194E+01	.12788E+01	.60689E+00
.89000E+00	-.22860E+00	.70626E+00	.31302E+00	.88211E-01	.52656E-01	.37703E-01	-.10076E+01	.12045E+01	.58458E+00
.90000E+00	-.22847E+00	.68711E+00	.30190E+00	.80302E-01	.64546E-01	.44060E-01	-.99626E+00	.11323E+01	.56294E+00
.91000E+00	-.22830E+00	.66813E+00	.29385E+00	.71754E-01	.72201E-01	.48559E-01	-.98538E+00	.10619E+01	.54191E+00
.92000E+00	-.22810E+00	.64928E+00	.28586E+00	.62637E-01	.75946E-01	.51343E-01	-.97494E+00	.99328E+00	.52144E+00
.93000E+00	-.22786E+00	.63052E+00	.27919E+00	.53016E-01	.76076E-01	.52542E-01	-.96491E+00	.92619E+00	.50149E+00
.94000E+00	-.22760E+00	.61182E+00	.26999E+00	.42945E-01	.72859E-01	.52273E-01	-.95527E+00	.86053E+00	.48201E+00
.95000E+00	-.22731E+00	.59314E+00	.26208E+00	.32477E-01	.66539E-01	.50644E-01	-.94601E+00	.79616E+00	.46297E+00
.96000E+00	-.22700E+00	.57447E+00	.25417E+00	.21656E-01	.57339E-01	.47752E-01	-.93709E+00	.73298E+00	.44432E+00
.97000E+00	-.22668E+00	.55577E+00	.24626E+00	.10522E-01	.45463E-01	.43687E-01	-.92851E+00	.67088E+00	.42605E+00
.98000E+00	-.22633E+00	.53701E+00	.23832E+00	-.88743E-03	.31097E-01	.38531E-01	-.92024E+00	.60976E+00	.40811E+00
.99000E+00	-.22597E+00	.51818E+00	.23035E+00	-.12541E-01	.14410E-01	.32357E-01	-.91228E+00	.54953E+00	.39048E+00
.10000E+01	-.22559E+00	.49925E+00	.22235E+00	-.24409E-01	-.44424E-02	.25235E-01	-.90459E+00	.49010E+00	.37314E+00

THETA= .10472E+01

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.18054E+00	.63808E+00	.35977E+00	.90158E-03	.31813E-01	.33163E-01	-.11282E+01	.17165E+01	.47207E+00
.89000E+00	-.17986E+00	.62107E+00	.35048E+00	-.15929E-02	.46305E-01	.42624E-01	-.10695E+01	.16685E+01	.45472E+00
.90000E+00	-.17915E+00	.60424E+00	.34130E+00	-.40544E-02	.56760E-01	.49810E-01	-.10127E+01	.16218E+01	.43789E+00
.91000E+00	-.17842E+00	.58755E+00	.33220E+00	-.65085E-02	.63492E-01	.54897E-01	-.95772E+00	.15762E+01	.42153E+00
.92000E+00	-.17767E+00	.57097E+00	.32317E+00	-.89779E-02	.66786E-01	.58045E-01	-.90432E+00	.15316E+01	.40561E+00
.93000E+00	-.17690E+00	.55447E+00	.31418E+00	-.11482E-01	.66900E-01	.59400E-01	-.85240E+00	.14880E+01	.39009E+00
.94000E+00	-.17612E+00	.53802E+00	.30522E+00	-.14039E-01	.64071E-01	.59096E-01	-.80185E+00	.14453E+01	.37494E+00
.95000E+00	-.17531E+00	.52160E+00	.29628E+00	-.16664E-01	.58513E-01	.57254E-01	-.75256E+00	.14034E+01	.36012E+00
.96000E+00	-.17449E+00	.50518E+00	.28735E+00	-.19369E-01	.50423E-01	.53985E-01	-.70442E+00	.13623E+01	.34562E+00
.97000E+00	-.17364E+00	.48873E+00	.27840E+00	-.22167E-01	.39980E-01	.49389E-01	-.65735E+00	.13218E+01	.33141E+00
.98000E+00	-.17278E+00	.47224E+00	.26943E+00	-.25067E-01	.27346E-01	.43560E-01	-.61125E+00	.12819E+01	.31745E+00
.99000E+00	-.17190E+00	.45568E+00	.26042E+00	-.28079E-01	.12672E-01	.36580E-01	-.56604E+00	.12427E+01	.30374E+00
.10000E+01	-.17100E+00	.43904E+00	.25137E+00	-.31209E-01	-.39066E-02	.28529E-01	-.52166E+00	.12039E+01	.29025E+00

THETA= .12217E+01

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.51415E+00	.47360E+00	.39037E+00	-.76136E-01	.23613E-01	.35983E-01	-.12169E+01	.20733E+01	.32292E+00
.89000E+00	-.51284E+00	.46098E+00	.38030E+00	-.74802E-01	.36369E-01	.46250E-01	-.11200E+01	.20468E+01	.31105E+00
.90000E+00	-.51144E+00	.44848E+00	.37034E+00	-.72822E-01	.42129E-01	.54047E-01	-.10262E+01	.20209E+01	.29954E+00
.91000E+00	-.50998E+00	.43609E+00	.36046E+00	-.70309E-01	.47126E-01	.59566E-01	-.93518E+00	.19954E+01	.28835E+00

THETA= R  
-92000E+00 .50846E+00 .42379E+00 .35066E+00 -.67359E-01 .49570E-01 .62982E-01 -.84675E+00 .19705E+01 .27745E+00  
-93000E+00 .50687E+00 .41154E+00 .34091E+00 -.64062E-01 .49655E-01 .64453E-01 -.76068E+00 .19461E+01 .26684E+00  
-94000E+00 .50523E+00 .39934E+00 .33119E+00 -.60473E-01 .47555E-01 .64123E-01 -.67678E+00 .19221E+01 .25647E+00  
-95000E+00 .50353E+00 .38715E+00 .32149E+00 -.56723E-01 .43430E-01 .62124E-01 -.59486E+00 .18985E+01 .24634E+00  
-96000E+00 .50178E+00 .37496E+00 .31179E+00 -.52813E-01 .37426E-01 .58577E-01 -.51475E+00 .18752E+01 .23642E+00  
-97000E+00 .49599E+00 .36275E+00 .30208E+00 -.48815E-01 .29674E-01 .53590E-01 -.43630E+00 .19524E+01 .22670E+00  
-98000E+00 .49814E+00 .35051E+00 .29234E+00 -.4778E-01 .20297E-01 .47265E-01 -.35935E+00 .18299E+01 .21715E+00  
-99000E+00 .49625E+00 .33822E+00 .28257E+00 -.40745E-01 .94054E-02 .39692E-01 -.28379E+00 .18077E+01 .20777E+00  
-10000E+01 .49431E+00 .32586E+00 .27275E+00 -.36752E-01 .28996E-02 .30956E-01 -.20948E+00 .17858E+01 .19854E+00

UBAR  
-88000E+00 .73150E+00 .25200E+00 .40911E+00 -.12642E+00 .12564E-01 .37711E-01 -.12748E+01 .23062E+01 .16395E+00  
-89000E+00 .73017E+00 .24528E+00 .39856E+00 -.12259E+00 .18287E-01 .48471E-01 -.11530E+01 .22937E+01 .15792E+00  
-90000E+00 .72833E+00 .23863E+00 .38812E+00 -.11771E+00 .22416E-01 .56642E-01 -.10350E+01 .22813E+01 .15208E+00  
-91000E+00 .72639E+00 .23204E+00 .37777E+00 -.11195E+00 .25075E-01 .62426E-01 -.92046E+00 .22691E+01 .14640E+00  
-92000E+00 .72436E+00 .22549E+00 .36749E+00 -.10546E+00 .26376E-01 .66006E-01 -.80917E+00 .22570E+01 .14087E+00  
-93000E+00 .72224E+00 .21898E+00 .35727E+00 -.98380E-01 .25421E-01 .67547E-01 -.70082E+00 .22450E+01 .13548E+00  
-94000E+00 .72004E+00 .21248E+00 .34709E+00 -.90814E-01 .25304E-01 .67202E-01 -.59515E+00 .22332E+01 .13021E+00  
-95000E+00 .71776E+00 .20600E+00 .33692E+00 -.82871E-01 .23109E-01 .65107E-01 -.49193E+00 .22216E+01 .12507E+00  
-96000E+00 .71541E+00 .19951E+00 .32676E+00 -.74641E-01 .19914E-01 .61389E-01 -.39095E+00 .22101E+01 .12003E+00  
-97000E+00 .71299E+00 .19302E+00 .31658E+00 -.66208E-01 .15789E-01 .56163E-01 -.29201E+00 .21987E+01 .11510E+00  
-98000E+00 .71051E+00 .18650E+00 .30638E+00 -.57644E-01 .10800E-01 .49534E-01 -.19494E+00 .21876E+01 .11025E+00  
-99000E+00 .70795E+00 .17996E+00 .29614E+00 -.49012E-01 .50045E-02 .41598E-01 -.99563E-01 .21765E+01 .10549E+00  
-10000E+01 .70534E+00 .17339E+00 .28584E+00 -.40370E-01 .15428E-02 .32442E-01 -.57273E-02 .21657E+01 .10080E+00

THETA= R  
-88000E+00 .80753E+00 .39354E-13 .41542E+00 -.14388E+00 .19621E-14 .38293E-01 -.12949E+01 .23871E+01 .25215E-13  
-89000E+00 .80655E+00 .38305E-13 .40471E+00 -.13918E+00 .28559E-14 .49218E-01 -.11644E+01 .23794E+01 .24238E-13  
-90000E+00 .80565E+00 .37267E-13 .39410E+00 -.13330E+00 .35008E-14 .57516E-01 -.10380E+01 .23718E+01 .23389E-13  
-91000E+00 .80455E+00 .36238E-13 .38360E+00 -.12644E+00 .39160E-14 .67024E-01 -.91535E+00 .23641E+01 .22515E-13  
-92000E+00 .79934E+00 .35215E-13 .37316E+00 -.11870E+00 .41191E-14 .67024E-01 -.79612E+00 .23565E+01 .21665E-13  
-93000E+00 .79704E+00 .34198E-13 .36278E+00 -.11030E+00 .41262E-14 .68589E-01 -.68002E+00 .23489E+01 .20836E-13  
-94000E+00 .79465E+00 .33183E-13 .35244E+00 -.10134E+00 .39517E-14 .68234E-01 -.56679E+00 .23413E+01 .20027E-13  
-95000E+00 .79217E+00 .32170E-13 .34212E+00 -.91951E-01 .36089E-14 .66111E-01 -.45618E+00 .23338E+01 .19235E-13  
-96000E+00 .78961E+00 .31158E-13 .33180E+00 -.82222E-01 .31099E-14 .62336E-01 -.34795E+00 .23264E+01 .18461E-13  
-97000E+00 .78697E+00 .30143E-13 .32147E+00 -.72249E-01 .24658E-14 .57030E-01 -.24191E+00 .23190E+01 .17702E-13  
-98000E+00 .78426E+00 .29126E-13 .31111E+00 -.62112E-01 .16866E-14 .50298E-01 -.13784E+00 .23118E+01 .16956E-13  
-99000E+00 .78148E+00 .28105E-13 .30071E+00 -.51884E-01 .78155E-15 .42239E-01 -.35582E-01 .23046E+01 .16224E-13  
-10000E+01 .77862E+00 .27078E-13 .29025E+00 -.41626E-01 .24094E-15 .32942E-01 .65036E-01 .22976E+01 .15503E-13

THETA= R  
-88000E+00 .73190E+00 .25200E+00 .40911E+00 -.12642E+00 .12564E-01 .37711E-01 -.12748E+01 .23062E+01 .16395E+00  
-89000E+00 .73017E+00 .24528E+00 .39856E+00 -.12259E+00 .18287E-01 .48471E-01 -.11530E+01 .22937E+01 .15792E+00  
-90000E+00 .72833E+00 .23863E+00 .38812E+00 -.11771E+00 .22416E-01 .56642E-01 -.10350E+01 .22813E+01 .15208E+00  
-91000E+00 .72639E+00 .23204E+00 .37777E+00 -.11195E+00 .25075E-01 .62426E-01 -.92046E+00 .22691E+01 .14640E+00  
-92000E+00 .72436E+00 .22549E+00 .36749E+00 -.10546E+00 .26376E-01 .66006E-01 -.80917E+00 .22570E+01 .14087E+00  
-93000E+00 .72224E+00 .21898E+00 .35727E+00 -.98380E-01 .25421E-01 .67547E-01 -.70082E+00 .22450E+01 .13548E+00  
-94000E+00 .72004E+00 .21248E+00 .34709E+00 -.90814E-01 .25304E-01 .67202E-01 -.59515E+00 .22332E+01 .13021E+00  
-95000E+00 .71776E+00 .20600E+00 .33692E+00 -.82871E-01 .23109E-01 .65107E-01 -.49193E+00 .22216E+01 .12507E+00  
-96000E+00 .71541E+00 .19951E+00 .32676E+00 -.74641E-01 .19914E-01 .61389E-01 -.39095E+00 .22101E+01 .12003E+00  
-97000E+00 .71299E+00 .19302E+00 .31658E+00 -.66208E-01 .15789E-01 .56163E-01 -.29201E+00 .21987E+01 .11510E+00  
-98000E+00 .71051E+00 .18650E+00 .30638E+00 -.57644E-01 .10800E-01 .49534E-01 -.19494E+00 .21876E+01 .11025E+00  
-99000E+00 .70795E+00 .17996E+00 .29614E+00 -.49012E-01 .50045E-02 .41598E-01 -.99563E-01 .21765E+01 .10549E+00  
-10000E+01 .70534E+00 .17339E+00 .28584E+00 -.40370E-01 .15428E-02 .32442E-01 -.57273E-02 .21657E+01 .10080E+00

THETA= R  
-88000E+00 .73190E+00 .25200E+00 .40911E+00 -.12642E+00 .12564E-01 .37711E-01 -.12748E+01 .23062E+01 .16395E+00  
-89000E+00 .73017E+00 .24528E+00 .39856E+00 -.12259E+00 .18287E-01 .48471E-01 -.11530E+01 .22937E+01 .15792E+00  
-90000E+00 .72833E+00 .23863E+00 .38812E+00 -.11771E+00 .22416E-01 .56642E-01 -.10350E+01 .22813E+01 .15208E+00  
-91000E+00 .72639E+00 .23204E+00 .37777E+00 -.11195E+00 .25075E-01 .62426E-01 -.92046E+00 .22691E+01 .14640E+00  
-92000E+00 .72436E+00 .22549E+00 .36749E+00 -.10546E+00 .26376E-01 .66006E-01 -.80917E+00 .22570E+01 .14087E+00  
-93000E+00 .72224E+00 .21898E+00 .35727E+00 -.98380E-01 .25421E-01 .67547E-01 -.70082E+00 .22450E+01 .13548E+00  
-94000E+00 .72004E+00 .21248E+00 .34709E+00 -.90814E-01 .25304E-01 .67202E-01 -.59515E+00 .22332E+01 .13021E+00  
-95000E+00 .71776E+00 .20600E+00 .33692E+00 -.82871E-01 .23109E-01 .65107E-01 -.49193E+00 .22216E+01 .12507E+00  
-96000E+00 .71541E+00 .19951E+00 .32676E+00 -.74641E-01 .19914E-01 .61389E-01 -.39095E+00 .22101E+01 .12003E+00  
-97000E+00 .71299E+00 .19302E+00 .31658E+00 -.66208E-01 .15789E-01 .56163E-01 -.29201E+00 .21987E+01 .11510E+00  
-98000E+00 .71051E+00 .18650E+00 .30638E+00 -.57644E-01 .10800E-01 .49534E-01 -.19494E+00 .21876E+01 .11025E+00  
-99000E+00 .70795E+00 .17996E+00 .29614E+00 -.49012E-01 .50045E-02 .41598E-01 -.99563E-01 .21765E+01 .10549E+00  
-10000E+01 .70534E+00 .17339E+00 .28584E+00 -.40370E-01 .15428E-02 .32442E-01 -.57273E-02 .21657E+01 .10080E+00

.88000E+00	.51415E+00	.39037E+00	.14613E-01	.35983E-01	-.12169E+01	.20733E+01	-.32292E+00
.89000E+00	.51284E+00	.38030E+00	-.74802E-01	.46250E-01	-.11200E+01	.20468E+01	-.31105E+00
.90000E+00	.51144E+00	.37034E+00	-.72822E-01	.54047E-01	-.10262E+01	.20209E+01	-.29954E+00
.91000E+00	.50998E+00	.36046E+00	-.70309E-01	.59566E-01	-.93518E+00	.19954E+01	-.28835E+00
.92000E+00	.50846E+00	.35066E+00	-.67359E-01	.62982E-01	-.84675E+00	.19705E+01	-.27745E+00
.93000E+00	.50687E+00	.34091E+00	-.64062E-01	.64453E-01	-.76068E+00	.19461E+01	-.26684E+00
.94000E+00	.50523E+00	.33119E+00	-.60493E-01	.64123E-01	-.67678E+00	.19221E+01	-.25647E+00
.95000E+00	.50353E+00	.32149E+00	-.56723E-01	.62124E-01	-.59486E+00	.18985E+01	-.24634E+00
.96000E+00	.50178E+00	.31179E+00	-.52813E-01	.58577E-01	-.51475E+00	.18752E+01	-.23642E+00
.97000E+00	.49995E+00	.30208E+00	-.48815E-01	.53590E-01	-.43630E+00	.18524E+01	-.22670E+00
.98000E+00	.49814E+00	.29234E+00	-.44778E-01	.47265E-01	-.35935E+00	.18299E+01	-.21715E+00
.99000E+00	.49625E+00	.28257E+00	-.40745E-01	.39692E-01	-.28379E+00	.18077E+01	-.20777E+00
.10000E+01	.49431E+00	.27275E+00	-.36752E-01	.30956E-01	-.20948E+00	.17858E+01	-.19854E+00

FEE= .87266E+00  
THETA= 0.

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.17004E+01	0.	0.	.43525E+00	0.	0.	-.29519E+00	-.62815E+00	.94415E+00
.89000E+00	-.16375E+01	0.	0.	.41117E+00	0.	0.	-.46415E+00	-.78487E+00	.90945E+00
.90000E+00	-.16944E+01	0.	0.	.38367E+00	0.	0.	-.62811E+00	-.93696E+00	.87578E+00
.91000E+00	-.16910E+01	0.	0.	.35321E+00	0.	0.	-.78753E+00	-.10849E+01	.84307E+00
.92000E+00	-.16873E+01	0.	0.	.32018E+00	0.	0.	-.94283E+00	-.12289E+01	.81122E+00
.93000E+00	-.16835E+01	0.	0.	.28497E+00	0.	0.	-.10944E+01	-.13695E+01	.78018E+00
.94000E+00	-.16795E+01	0.	0.	.24788E+00	0.	0.	-.12426E+01	-.15070E+01	.74988E+00
.95000E+00	-.16753E+01	0.	0.	.20920E+00	0.	0.	-.13877E+01	-.16417E+01	.72025E+00
.96000E+00	-.16709E+01	0.	0.	.16919E+00	0.	0.	-.15301E+01	-.17738E+01	.69125E+00
.97000E+00	-.16663E+01	0.	0.	.12808E+00	0.	0.	-.16699E+01	-.19037E+01	.66281E+00
.98000E+00	-.16616E+01	0.	0.	.86069E-01	0.	0.	-.18076E+01	-.20315E+01	.63491E+00
.99000E+00	-.16568E+01	0.	0.	.43337E-01	0.	0.	-.19432E+01	-.21574E+01	.60749E+00
.10000E+01	-.16519E+01	0.	0.	.43952E-04	0.	0.	-.20770E+01	-.22817E+01	.58051E+00

THETA= .17453E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.16174E+01	.27705E+00	.72138E-01	.41839E+00	.14873E-01	.66495E-02	-.31665E+00	-.53858E+00	.92980E+00
.89000E+00	-.16146E+01	.26969E+00	.70276E-01	.39527E+00	.21256E-01	.85467E-02	-.47608E+00	-.68994E+00	.89563E+00
.90000E+00	-.16116E+01	.26240E+00	.68433E-01	.36888E+00	.25885E-01	.99875E-02	-.63079E+00	-.83683E+00	.86248E+00
.91000E+00	-.16084E+01	.25517E+00	.66611E-01	.33967E+00	.28898E-01	.11007E-01	-.78123E+00	-.97965E+00	.83026E+00
.92000E+00	-.16050E+01	.24800E+00	.64799E-01	.30800E+00	.30418E-01	.11639E-01	-.92779E+00	-.11188E+01	.79890E+00
.93000E+00	-.16013E+01	.24086E+00	.62997E-01	.27424E+00	.30557E-01	.11910E-01	-.10708E+01	-.12546E+01	.76833E+00
.94000E+00	-.15975E+01	.23374E+00	.61201E-01	.23869E+00	.29419E-01	.11849E-01	-.12107E+01	-.13874E+01	.73848E+00
.95000E+00	-.15935E+01	.22663E+00	.59408E-01	.20162E+00	.27096E-01	.11480E-01	-.13477E+01	-.15175E+01	.70931E+00
.96000E+00	-.15893E+01	.21952E+00	.57616E-01	.16328E+00	.23673E-01	.10825E-01	-.14821E+01	-.15452E+01	.68074E+00
.97000E+00	-.15850E+01	.21240E+00	.55822E-01	.12388E+00	.19229E-01	.99031E-02	-.16141E+01	-.17706E+01	.65275E+00
.98000E+00	-.15806E+01	.20527E+00	.54023E-01	.83612E-01	.13833E-01	.87342E-02	-.17440E+01	-.18941E+01	.62526E+00
.99000E+00	-.15760E+01	.19810E+00	.52217E-01	.42654E-01	.75519E-02	.73348E-02	-.18721E+01	-.20157E+01	.59826E+00
.10000E+01	-.15713E+01	.19089E+00	.50402E-01	.11558E-02	.44385E-03	.57204E-02	-.19984E+01	-.21358E+01	.57169E+00

THETA= .34907E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.13782E+01	.52069E+00	.14208E+00	.36984E+00	.27953E-01	.13097E-01	-.37843E+00	-.28068E+00	.88721E+00
.89000E+00	-.13759E+01	.50685E+00	.13842E+00	.34948E+00	.39947E-01	.16834E-01	-.51042E+00	-.41658E+00	.85450E+00
.90000E+00	-.13734E+01	.49315E+00	.13479E+00	.32630E+00	.48648E-01	.19672E-01	-.63852E+00	-.54850E+00	.82297E+00
.91000E+00	-.13707E+01	.47957E+00	.13120E+00	.30068E+00	.54310E-01	.21680E-01	-.76310E+00	-.67679E+00	.79222E+00
.92000E+00	-.13677E+01	.46608E+00	.12763E+00	.27293E+00	.57167E-01	.22924E-01	-.88450E+00	-.80179E+00	.76230E+00
.93000E+00	-.13647E+01	.45266E+00	.12408E+00	.24337E+00	.57429E-01	.23459E-01	-.10030E+01	-.92382E+00	.73313E+00
.94000E+00	-.13614E+01	.43928E+00	.12054E+00	.21225E+00	.55289E-01	.23339E-01	-.11189E+01	-.10432E+01	.70465E+00
.95000E+00	-.13591E+01	.42592E+00	.11701E+00	.17981E+00	.50923E-01	.22611E-01	-.12324E+01	-.11601E+01	.67681E+00
.96000E+00	-.13545E+01	.41256E+00	.11348E+00	.14625E+00	.44491E-01	.21320E-01	-.13438E+01	-.12748E+01	.64956E+00
.97000E+00	-.13509E+01	.39919E+00	.10995E+00	.11177E+00	.36138E-01	.19505E-01	-.14533E+01	-.13875E+01	.62284E+00
.98000E+00	-.13471E+01	.38577E+00	.10640E+00	.76537E-01	.25998E-01	.17203E-01	-.15611E+01	-.14984E+01	.59662E+00
.99000E+00	-.13432E+01	.37230E+00	.10285E+00	.40687E-01	.14193E-01	.14447E-01	-.16673E+01	-.16078E+01	.57085E+00
.10000E+01	-.13392E+01	.35876E+00	.99272E-01	.43572E-02	.83416E-03	.11267E-01	-.17722E+01	-.17157E+01	.54550E+00

THETA= .52360E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.10118E+01	.70152E+00	.20771E+00	.29546E+00	.37661E-01	.19146E-01	-.47310E+00	-.11445E+00	.81765E+00
.89000E+00	-.10102E+01	.68287E+00	.20235E+00	.27934E+00	.53821E-01	.24609E-01	-.56303E+00	-.22181E-02	.78761E+00
.90000E+00	-.10084E+01	.66442E+00	.19705E+00	.26107E+00	.65543E-01	.28758E-01	-.65036E+00	-.10676E+00	.75845E+00
.91000E+00	-.10064E+01	.64612E+00	.19190E+00	.24094E+00	.73172E-01	.31695E-01	-.73533E+00	-.21277E+00	.73012E+00
.92000E+00	-.10043E+01	.62795E+00	.18658E+00	.21920E+00	.77021E-01	.33512E-01	-.81817E+00	-.31610E+00	.70254E+00
.93000E+00	-.10021E+01	.60987E+00	.18139E+00	.19606E+00	.77374E-01	.34295E-01	-.89908E+00	-.41699E+00	.67566E+00
.94000E+00	-.99977E+00	.59184E+00	.17622E+00	.17173E+00	.74491E-01	.34119E-01	-.97826E+00	-.51568E+00	.64941E+00
.95000E+00	-.99734E+00	.57384E+00	.17106E+00	.14638E+00	.68609E-01	.33056E-01	-.10559E+01	-.61237E+00	.62375E+00

.96000E+00 -.99480E+00 .5595E+00 .16590E+00 .12017E+00 .59942E-01 .31168E-01 -.11321E+01 -.70726E+00 .59864E+00  
 .97000E+00 -.99217E+00 .53782E+00 .16073E+00 .93232E-01 .48689E-01 .28515E-01 -.12070E+01 -.80052E+00 .57401E+00  
 .98000E+00 -.98945E+00 .51975E+00 .15555E+00 .65697E-01 .35027E-01 .25149E-01 -.12808E+01 -.89231E+00 .54985E+00  
 .99000E+00 -.98665E+00 .50160E+00 .15035E+00 .37675E-01 .19122E-01 .21120E-01 -.13536E+01 -.98279E+00 .52610E+00  
 .10000E+01 -.98377E+00 .48336E+00 .14513E+00 .92621E-02 .11239E-02 .16471E-01 -.14255E+01 -.10721E+01 .50273E+00  
 THETA= .69813E+00

.88000E+00 -.56232E+00 .79774E+00 .26703E+00 .20422E+00 .42826E-01 .24614E-01 -.58922E+00 .59915E+00 .72326E+00  
 .89000E+00 -.56150E+00 .77653E+00 .26014E+00 .19329E+00 .61203E-01 .31637E-01 -.62756E+00 .51596E+00 .69688E+00  
 .90000E+00 -.56058E+00 .75555E+00 .25332E+00 .18105E+00 .74533E-01 .36970E-01 -.66488E+00 .43512E+00 .67089E+00  
 .91000E+00 -.55958E+00 .73475E+00 .24657E+00 .16767E+00 .83208E-01 .40746E-01 -.70126E+00 .35643E+00 .64583E+00  
 .92000E+00 -.55850E+00 .71408E+00 .23986E+00 .15329E+00 .87585E-01 .43082E-01 -.73680E+00 .27969E+00 .62143E+00  
 .93000E+00 -.55735E+00 .69352E+00 .23319E+00 .13804E+00 .87987E-01 .44088E-01 -.77160E+00 .20472E+00 .59765E+00  
 .94000E+00 -.55613E+00 .67302E+00 .22655E+00 .12203E+00 .84708E-01 .43863E-01 -.80574E+00 .13137E+00 .57444E+00  
 .95000E+00 -.55486E+00 .65255E+00 .21991E+00 .10538E+00 .78019E-01 .42496E-01 -.83928E+00 .59470E-01 .55174E+00  
 .96000E+00 -.55352E+00 .63209E+00 .21328E+00 .88171E-01 .68164E-01 .40069E-01 -.87230E+00 .-11104E-01 .52952E+00  
 .97000E+00 -.55214E+00 .61159E+00 .20663E+00 .70487E-01 .55366E-01 .36658E-01 -.90485E+00 .-80480E-01 .50775E+00  
 .98000E+00 -.55071E+00 .59104E+00 .19997E+00 .52401E-01 .39831E-01 .32331E-01 -.93699E+00 .-14878E-01 .48637E+00  
 .99000E+00 -.54923E+00 .57040E+00 .19329E+00 .33979E-01 .27145E-01 .27151E-01 -.96878E+00 .-21610E+00 .46536E+00  
 .10000E+01 -.54771E+00 .54966E+00 .18657E+00 .15279E-01 .12780E-02 .21175E-01 -.10003E+01 -.28254E+00 .44469E+00  
 THETA= .87266E+00

.88000E+00 -.84013E-01 .79774E+00 .31823E+00 .10712E+00 .42825E-01 .29334E-01 -.71279E+00 .11149E+01 .60689E+00  
 .89000E+00 -.84055E-01 .77653E+00 .31002E+00 .10171E+00 .61203E-01 .37703E-01 -.69624E+00 .10627E+01 .58458E+00  
 .90000E+00 -.84077E-01 .75555E+00 .30190E+00 .95891E-01 .74533E-01 .44060E-01 -.68033E+00 .10118E+01 .56294E+00  
 .91000E+00 -.84083E-01 .73475E+00 .29385E+00 .89688E-01 .83208E-01 .48559E-01 -.66500E+00 .96216E+00 .54191E+00  
 .92000E+00 -.84074E-01 .71408E+00 .28586E+00 .83141E-01 .87585E-01 .51343E-01 -.65022E+00 .91372E+00 .52144E+00  
 .93000E+00 -.84052E-01 .69352E+00 .27791E+00 .76283E-01 .87987E-01 .52542E-01 -.63595E+00 .86634E+00 .50149E+00  
 .94000E+00 -.84019E-01 .67302E+00 .26999E+00 .69143E-01 .84708E-01 .52273E-01 -.62215E+00 .81994E+00 .48201E+00  
 .95000E+00 -.83977E-01 .65255E+00 .26208E+00 .61747E-01 .78019E-01 .50644E-01 -.60880E+00 .77443E+00 .46297E+00  
 .96000E+00 -.83927E-01 .63209E+00 .25417E+00 .54120E-01 .68164E-01 .47752E-01 -.59586E+00 .72973E+00 .44432E+00  
 .97000E+00 -.83870E-01 .61159E+00 .24626E+00 .46281E-01 .55366E-01 .43687E-01 -.58330E+00 .68577E+00 .42605E+00  
 .98000E+00 -.83808E-01 .59104E+00 .23832E+00 .38251E-01 .39831E-01 .38531E-01 -.57111E+00 .64248E+00 .40811E+00  
 .99000E+00 -.83741E-01 .57040E+00 .23035E+00 .30046E-01 .32357E-01 .32357E-01 -.55926E+00 .59980E+00 .39048E+00  
 .10000E+01 -.83671E-01 .54966E+00 .22235E+00 .21682E-01 .12780E-02 .25235E-01 -.54772E+00 .55767E+00 .37314E+00  
 THETA= .10472E+01

.88000E+00 .36545E+00 .70152E+00 .35977E+00 .15873E-01 .37661E-01 .33163E-01 -.82891E+00 .15996E+01 .47207E+00  
 .89000E+00 .36460E+00 .68287E+00 .35048E+00 .15665E-01 .53821E-01 .42624E-01 -.76078E+00 .15764E+01 .45472E+00  
 .90000E+00 .36369E+00 .66442E+00 .34130E+00 .15870E-01 .65543E-01 .49810E-01 -.69485E+00 .15537E+01 .43789E+00  
 .91000E+00 .36274E+00 .64612E+00 .33220E+00 .16413E-01 .73172E-01 .54897E-01 -.63093E+00 .15314E+01 .42153E+00  
 .92000E+00 .36174E+00 .62795E+00 .32317E+00 .17227E-01 .77021E-01 .58045E-01 -.56885E+00 .15095E+01 .40561E+00  
 .93000E+00 .36070E+00 .60987E+00 .31418E+00 .18255E-01 .77374E-01 .59400E-01 -.50847E+00 .14881E+01 .39009E+00  
 .94000E+00 .35962E+00 .59184E+00 .30522E+00 .19443E-01 .74491E-01 .59096E-01 -.44963E+00 .14670E+01 .37494E+00  
 .95000E+00 .35850E+00 .57384E+00 .29628E+00 .20746E-01 .68609E-01 .57254E-01 -.39221E+00 .14643E+01 .36012E+00  
 .96000E+00 .35735E+00 .55585E+00 .28735E+00 .22122E-01 .59942E-01 .53985E-01 -.33609E+00 .14259E+01 .34562E+00  
 .97000E+00 .35616E+00 .53782E+00 .27840E+00 .23536E-01 .48683E-01 .49389E-01 -.28115E+00 .14058E+01 .33141E+00  
 .98000E+00 .35493E+00 .51975E+00 .26943E+00 .24955E-01 .35027E-01 .43560E-01 -.22729E+00 .13860E+01 .31745E+00  
 .99000E+00 .35368E+00 .50160E+00 .26042E+00 .26351E-01 .19122E-01 .36580E-01 -.17443E+00 .13665E+01 .30374E+00  
 .10000E+01 .35239E+00 .48336E+00 .25137E+00 .27698E-01 .11239E-02 .28529E-01 -.12247E+00 .13472E+01 .29025E+00  
 THETA= .12217E+01

.88000E+00 .73186E+00 .52069E+00 .39037E+00 .-58509E-01 .27953E-01 .35983E-01 -.92357E+00 .19948E+01 .32292E+00  
 .89000E+00 .73034E+00 .50685E+00 .38030E+00 .-54483E-01 .39947E-01 .46250E-01 -.81339E+00 .19952E+01 .31105E+00  
 .90000E+00 .72827E+00 .49315E+00 .37034E+00 .-49346E-01 .48648E-01 .54047E-01 -.70668E+00 .19954E+01 .29954E+00  
 .91000E+00 .72699E+00 .47957E+00 .36046E+00 .-43322E-01 .54310E-01 .59566E-01 -.60315E+00 .19954E+01 .28835E+00  
 THETA= .12217E+01



.92000E+00 .72517E+00 .46608E+00 .35066E+00 -.36506E-01 .57167E-01 .62982E-01 -.50252E+00 .19952E+01 .27745E+00  
 .93000E+00 .72327E+00 .45266E+00 .34091E+00 -.29050E-01 .57429E-01 .64453E-01 -.40455E+00 .19949E+01 .26684E+00  
 .94000E+00 .72128E+00 .43923E+00 .33119E+00 -.21079E-01 .55289E-01 .62123E-01 -.30899E+00 .19945E+01 .25647E+00  
 .95000E+00 .71922E+00 .42592E+00 .32149E+00 -.12679E-01 .50923E-01 .62124E-01 -.21565E+00 .19940E+01 .26434E+00  
 .96000E+00 .71708E+00 .41256E+00 .31179E+00 -.39623E-02 .44491E-01 .58577E-01 -.12432E+00 .19934E+01 .23642E+00  
 .97000E+00 .71487E+00 .39919E+00 .30208E+00 .49936E-02 .36138E-01 .53290E-01 -.34829E-01 .19928E+01 .22670E+00  
 .98000E+00 .71260E+00 .38577E+00 .29234E+00 .14115E-01 .25998E-01 .47265E-01 .52987E-01 .19921E+01 .21715E+00  
 .99000E+00 .71026E+00 .37230E+00 .28257E+00 .23338E-01 .14193E-01 .39692E-01 .13928E+00 .19915E+01 .20777E+00  
 .10000E+01 .70785E+00 .35876E+00 .27275E+00 .32603E-01 .83416E-03 .30956E-01 .22419E+00 .19909E+01 .19854E+00  
 THETA= .13963E+01

THETA= .13963E+01

.85000E+00 .97102E+00 .27705E+00 .40911E+00 -.10706E+00 .14873E-01 .37711E-01 -.98536E+00 .22527E+01 .16395E+00  
 .89000E+00 .96907E+00 .26969E+00 .39856E+00 -.10027E+00 .21256E-01 .48471E-01 -.84773E+00 .22686E+01 .15792E+00  
 .90000E+00 .96697E+00 .26240E+00 .38812E+00 -.91943E-01 .25885E-01 .56642E-01 -.71441E+00 .22837E+01 .15208E+00  
 .91000E+00 .96474E+00 .25517E+00 .37777E+00 -.82311E-01 .28898E-01 .62426E-01 -.58502E+00 .22982E+01 .14640E+00  
 .92000E+00 .96239E+00 .24800E+00 .36749E+00 -.71578E-01 .30418E-01 .66006E-01 -.45923E+00 .23122E+01 .14087E+00  
 .93000E+00 .95992E+00 .24086E+00 .35727E+00 -.59926E-01 .30557E-01 .67547E-01 -.33672E+00 .23257E+01 .13548E+00  
 .94000E+00 .95734E+00 .23374E+00 .34709E+00 -.47517E-01 .29419E-01 .67202E-01 -.21720E+00 .23388E+01 .13021E+00  
 .95000E+00 .95466E+00 .22663E+00 .33692E+00 -.34495E-01 .27096E-01 .65107E-01 -.10040E+00 .23514E+01 .12507E+00  
 .96000E+00 .95188E+00 .21952E+00 .32676E+00 -.20988E-01 .23673E-01 .61389E-01 .13902E-01 .23638E+01 .12003E+00  
 .97000E+00 .94901E+00 .21240E+00 .31658E+00 -.71091E-02 .19229E-01 .56163E-01 .12594E+00 .23759E+01 .11510E+00  
 .98000E+00 .94605E+00 .20527E+00 .30638E+00 .70405E-02 .13833E-01 .49534E-01 .23593E+00 .23878E+01 .11025E+00  
 .99000E+00 .94301E+00 .19810E+00 .29614E+00 .21371E-02 .75519E-02 .41598E-01 .34404E+00 .23994E+01 .10549E+00  
 .10000E+01 .93989E+00 .19089E+00 .28584E+00 .35805E-01 .44385E-03 .32442E-01 .45046E+00 .24110E+01 .10080E+00  
 THETA= .15708E+01

THETA= .15708E+01

.85000E+00 .10541E+01 .43267E-13 .41542E+00 -.12392E+00 .23228E-14 .38293E-01 -.10068E+01 .23422E+01 .25215E-13  
 .89000E+00 .10520E+01 .42117E-13 .40471E+00 -.11617E+00 .33195E-14 .49219E-01 -.85966E+00 .23635E+01 .24288E-13  
 .90000E+00 .10497E+01 .40979E-13 .39410E+00 -.10673E+00 .40425E-14 .57516E-01 -.71709E+00 .23839E+01 .23389E-13  
 .91000E+00 .10473E+01 .39850E-13 .38360E+00 -.95852E-01 .45130E-14 .63389E-01 -.57873E+00 .24034E+01 .22515E-13  
 .92000E+00 .10448E+01 .38730E-13 .37316E+00 -.83759E-01 .47504E-14 .67024E-01 -.44419E+00 .24223E+01 .21665E-13  
 .93000E+00 .10421E+01 .37614E-13 .36278E+00 -.70649E-01 .47721E-14 .68589E-01 -.31316E+00 .24406E+01 .20836E-13  
 .94000E+00 .10393E+01 .36503E-13 .35244E+00 -.56701E-01 .45943E-14 .68238E-01 -.18532E+00 .24583E+01 .20027E-13  
 .95000E+00 .10364E+01 .35393E-13 .34212E+00 -.42072E-01 .42315E-14 .66111E-01 -.60381E-01 .24756E+01 .19235E-13  
 .96000E+00 .10334E+01 .34283E-13 .33180E+00 -.26901E-01 .36970E-14 .62336E-01 .61905E-01 .24925E+01 .18461E-13  
 .97000E+00 .10303E+01 .33171E-13 .32147E+00 -.11312E-01 .30029E-14 .57030E-01 .18178E+00 .25090E+01 .17702E-13  
 .98000E+00 .10271E+01 .32056E-13 .31111E+00 .45834E-02 .21603E-14 .50298E-01 .29946E+00 .25252E+01 .16956E-13  
 .99000E+00 .10238E+01 .30937E-13 .30071E+00 .20699E-01 .11794E-14 .42239E-01 .41516E+00 .25411E+01 .16224E-13  
 .10000E+01 .10205E+01 .29812E-13 .29025E+00 .36916E-01 .69315E-16 .32942E-01 .52904E+00 .25569E+01 .15503E-13  
 THETA= .17453E+01

THETA= .17453E+01

.88000E+00 .97102E+00 .27705E+00 .40911E+00 -.10706E+00 .14873E-01 .37711E-01 -.98536E+00 .22527E+01 .16395E+00  
 .89000E+00 .96907E+00 .26969E+00 .39856E+00 -.10027E+00 .21256E-01 .48471E-01 -.84773E+00 .22686E+01 .15792E+00  
 .90000E+00 .96697E+00 .26240E+00 .38812E+00 -.91943E-01 .25885E-01 .56642E-01 -.71441E+00 .22837E+01 .15208E+00  
 .91000E+00 .96474E+00 .25517E+00 .37777E+00 -.82311E-01 .28898E-01 .62426E-01 -.58502E+00 .22982E+01 .14640E+00  
 .92000E+00 .96239E+00 .24800E+00 .36749E+00 -.71578E-01 .30418E-01 .66006E-01 -.45923E+00 .23122E+01 .14087E+00  
 .93000E+00 .95992E+00 .24086E+00 .35727E+00 -.59926E-01 .30557E-01 .67547E-01 -.33672E+00 .23257E+01 .13548E+00  
 .94000E+00 .95734E+00 .23374E+00 .34709E+00 -.47517E-01 .29419E-01 .67202E-01 -.21720E+00 .23388E+01 .13021E+00  
 .95000E+00 .95466E+00 .22663E+00 .33692E+00 -.34495E-01 .27096E-01 .65107E-01 -.10040E+00 .23514E+01 .12507E+00  
 .96000E+00 .95188E+00 .21952E+00 .32676E+00 -.20988E-01 .23673E-01 .61389E-01 .13902E-01 .23638E+01 .12003E+00  
 .97000E+00 .94901E+00 .21240E+00 .31658E+00 -.71091E-02 .19229E-01 .56163E-01 .12594E+00 .23759E+01 .11510E+00  
 .98000E+00 .94605E+00 .20527E+00 .30638E+00 .70405E-02 .13833E-01 .49534E-01 .23593E+00 .23878E+01 .11025E+00  
 .99000E+00 .94301E+00 .19810E+00 .29614E+00 .21371E-02 .75519E-02 .41598E-01 .34404E+00 .23994E+01 .10549E+00  
 .10000E+01 .93989E+00 .19089E+00 .28584E+00 .35805E-01 .44385E-03 .32442E-01 .45046E+00 .24110E+01 .10080E+00  
 THETA= .19199E+01

THETA= .19199E+01

.88000E+00 .97102E+00 .27705E+00 .40911E+00 -.10706E+00 .14873E-01 .37711E-01 -.98536E+00 .22527E+01 .16395E+00  
 .89000E+00 .96907E+00 .26969E+00 .39856E+00 -.10027E+00 .21256E-01 .48471E-01 -.84773E+00 .22686E+01 .15792E+00  
 .90000E+00 .96697E+00 .26240E+00 .38812E+00 -.91943E-01 .25885E-01 .56642E-01 -.71441E+00 .22837E+01 .15208E+00  
 .91000E+00 .96474E+00 .25517E+00 .37777E+00 -.82311E-01 .28898E-01 .62426E-01 -.58502E+00 .22982E+01 .14640E+00  
 .92000E+00 .96239E+00 .24800E+00 .36749E+00 -.71578E-01 .30418E-01 .66006E-01 -.45923E+00 .23122E+01 .14087E+00  
 .93000E+00 .95992E+00 .24086E+00 .35727E+00 -.59926E-01 .30557E-01 .67547E-01 -.33672E+00 .23257E+01 .13548E+00  
 .94000E+00 .95734E+00 .23374E+00 .34709E+00 -.47517E-01 .29419E-01 .67202E-01 -.21720E+00 .23388E+01 .13021E+00  
 .95000E+00 .95466E+00 .22663E+00 .33692E+00 -.34495E-01 .27096E-01 .65107E-01 -.10040E+00 .23514E+01 .12507E+00  
 .96000E+00 .95188E+00 .21952E+00 .32676E+00 -.20988E-01 .23673E-01 .61389E-01 .13902E-01 .23638E+01 .12003E+00  
 .97000E+00 .94901E+00 .21240E+00 .31658E+00 -.71091E-02 .19229E-01 .56163E-01 .12594E+00 .23759E+01 .11510E+00  
 .98000E+00 .94605E+00 .20527E+00 .30638E+00 .70405E-02 .13833E-01 .49534E-01 .23593E+00 .23878E+01 .11025E+00  
 .99000E+00 .94301E+00 .19810E+00 .29614E+00 .21371E-02 .75519E-02 .41598E-01 .34404E+00 .23994E+01 .10549E+00  
 .10000E+01 .93989E+00 .19089E+00 .28584E+00 .35805E-01 .44385E-03 .32442E-01 .45046E+00 .24110E+01 .10080E+00  
 THETA= .19199E+01



.88000E+00	.73186E+00	-.52069E+00	.39037E+00	-.58509E-01	-.27953E-01	.35983E-01	-.92357E+00	.19948E+01	-.32292E+00
.89000E+00	.73034E+00	-.50685E+00	.38030E+00	-.54483E-01	-.39947E-01	.46250E-01	-.81339E+00	.19952E+01	-.31105E+00
.90000E+00	.72872E+00	-.49315E+00	.37034E+00	-.49364E-01	-.48648E-01	.54047E-01	-.70668E+00	.19954E+01	-.29954E+00
.91000E+00	.72699E+00	-.47957E+00	.36046E+00	-.43322E-01	-.54310E-01	.59566E-01	-.60315E+00	.19954E+01	-.28835E+00
.92000E+00	.72517E+00	-.46608E+00	.35066E+00	-.36506E-01	-.57167E-01	.62982E-01	-.50252E+00	.19952E+01	-.27745E+00
.93000E+00	.72327E+00	-.45266E+00	.34091E+00	-.29050E-01	-.57429E-01	.64453E-01	-.40455E+00	.19949E+01	-.26684E+00
.94000E+00	.72128E+00	-.43928E+00	.33119E+00	-.21073E-01	-.55289E-01	.64123E-01	-.30899E+00	.19945E+01	-.25647E+00
.95000E+00	.71922E+00	-.42592E+00	.32149E+00	-.12679E-01	-.50923E-01	.62124E-01	-.21565E+00	.19940E+01	-.24634E+00
.96000E+00	.71708E+00	-.41256E+00	.31179E+00	-.39623E-02	-.44491E-01	.58577E-01	-.12432E+00	.19934E+01	-.23642E+00
.97000E+00	.71487E+00	-.39919E+00	.30208E+00	.49936E-02	-.36138E-01	.53590E-01	-.34829E-01	.19928E+01	-.22670E+00
.98000E+00	.71260E+00	-.38577E+00	.29234E+00	.14115E-01	-.25998E-01	.47265E-01	.52987E-01	.19921E+01	-.21715E+00
.99000E+00	.71026E+00	-.37230E+00	.28257E+00	.23338E-01	-.14193E-01	.39692E-01	.13928E+00	.19915E+01	-.20777E+00
.10000E+01	.70786E+00	-.35876E+00	.27275E+00	.32603E-01	-.83416E-03	.30956E-01	.22419E+00	.19909E+01	-.19854E+00

FEE= .10472E+01  
THETA= 0.

R									
UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF	
.88000E+00	-.17004E+01	0.	.43525E+00	0.	0.	.17686E-01	-.94102E+00	.83027E+00	
.89000E+00	-.16975E+01	0.	.41117E+00	0.	0.	-.16277E+00	-.10963E+01	.79976E+00	
.90000E+00	-.16944E+01	0.	.38367E+00	0.	0.	-.33789E+00	-.12272E+01	.77015E+00	
.91000E+00	-.16910E+01	0.	.35321E+00	0.	0.	-.50815E+00	-.13642E+01	.74138E+00	
.92000E+00	-.16873E+01	0.	.32018E+00	0.	0.	-.67400E+00	-.14977E+01	.71338E+00	
.93000E+00	-.16835E+01	0.	.28497E+00	0.	0.	-.83585E+00	-.16281E+01	.68608E+00	
.94000E+00	-.16795E+01	0.	.24788E+00	0.	0.	-.99407E+00	-.17555E+01	.65943E+00	
.95000E+00	-.16753E+01	0.	.20920E+00	0.	0.	-.11490E+01	-.18804E+01	.63338E+00	
.96000E+00	-.16709E+01	0.	.16919E+00	0.	0.	-.13010E+01	-.20029E+01	.60787E+00	
.97000E+00	-.16663E+01	0.	.12808E+00	0.	0.	-.14503E+01	-.21233E+01	.58287E+00	
.98000E+00	-.16616E+01	0.	.86069E-01	0.	0.	-.15972E+01	-.22419E+01	.55833E+00	
.99000E+00	-.16569E+01	0.	.43337E-01	0.	0.	-.17419E+01	-.23587E+01	.53421E+00	
.10000E+01	-.16519E+01	0.	.43952E-04	0.	0.	-.18846E+01	-.24741E+01	.51049E+00	

THETA= .17453E+00

R									
UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF	
.88000E+00	-.16104E+01	.63437E-01	.41896E+00	.17044E-01	.58475E-02	-.50420E-02	-.84329E+00	.81765E+00	
.89000E+00	-.16076E+01	.61800E-01	.39592E+00	.24045E-01	.75158E-02	-.17515E+00	-.98268E+00	.78761E+00	
.90000E+00	-.16047E+01	.60181E-01	.36954E+00	.29145E-01	.87829E-02	-.34023E+00	-.11180E+01	.75845E+00	
.91000E+00	-.16014E+01	.58576E-01	.34053E+00	.32490E-01	.96798E-02	-.50074E+00	-.12495E+01	.73012E+00	
.92000E+00	-.15980E+01	.56984E-01	.30899E+00	.34216E-01	.10235E-01	-.65710E+00	-.13777E+01	.70254E+00	
.93000E+00	-.15944E+01	.55398E-01	.27527E+00	.34444E-01	.10474E-01	-.80969E+00	-.15029E+01	.67566E+00	
.94000E+00	-.15906E+01	.53819E-01	.23966E+00	.33286E-01	.10420E-01	-.95888E+00	-.16251E+01	.64941E+00	
.95000E+00	-.15866E+01	.52243E-01	.20304E+00	.30842E-01	.10095E-01	-.11050E+01	-.17450E+01	.62375E+00	
.96000E+00	-.15824E+01	.50667E-01	.16485E+00	.27206E-01	.95190E-02	-.12483E+01	-.18626E+01	.59864E+00	
.97000E+00	-.15781E+01	.49089E-01	.12560E+00	.22460E-01	.87086E-02	-.13891E+01	-.19783E+01	.57401E+00	
.98000E+00	-.15737E+01	.47507E-01	.85502E-01	.16684E-01	.76807E-02	-.15276E+01	-.20921E+01	.54985E+00	
.99000E+00	-.15691E+01	.45919E-01	.44710E-01	.99456E-02	.64501E-02	-.16641E+01	-.22043E+01	.52610E+00	
.10000E+01	-.15644E+01	.44323E-01	.33813E-02	.23107E-02	.50304E-02	-.17987E+01	-.23151E+01	.50273E+00	

THETA= .34907E+00

R									
UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF	
.88000E+00	-.13511E+01	.12495E+00	.37204E+00	.32031E-01	.11517E-01	-.70486E-01	-.56188E+00	.78020E+00	
.89000E+00	-.13488E+01	.12172E+00	.35201E+00	.45189E-01	.14803E-01	-.21079E+00	-.68446E+00	.75153E+00	
.90000E+00	-.13463E+01	.11853E+00	.32922E+00	.54774E-01	.17299E-01	-.34697E+00	-.80344E+00	.72371E+00	
.91000E+00	-.13436E+01	.11537E+00	.30404E+00	.61062E-01	.19065E-01	-.47940E+00	-.91917E+00	.69667E+00	
.92000E+00	-.13408E+01	.11224E+00	.27677E+00	.64305E-01	.20159E-01	-.60843E+00	-.10319E+01	.67036E+00	
.93000E+00	-.13377E+01	.10911E+00	.24773E+00	.64734E-01	.20629E-01	-.73438E+00	-.11420E+01	.64470E+00	
.94000E+00	-.13345E+01	.10600E+00	.21716E+00	.62557E-01	.20524E-01	-.85753E+00	-.12497E+01	.61966E+00	
.95000E+00	-.13312E+01	.10290E+00	.18529E+00	.57965E-01	.19884E-01	-.97816E+00	-.13552E+01	.59518E+00	
.96000E+00	-.13277E+01	.99794E-01	.15233E+00	.51130E-01	.18749E-01	-.10965E+01	-.14588E+01	.57121E+00	
.97000E+00	-.13241E+01	.96686E-01	.11847E+00	.42212E-01	.17153E-01	-.12128E+01	-.15606E+01	.54772E+00	
.98000E+00	-.13204E+01	.93570E-01	.83868E-01	.31355E-01	.15129E-01	-.13272E+01	-.16609E+01	.52466E+00	
.99000E+00	-.13166E+01	.90443E-01	.48665E-01	.18692E-01	.12704E-01	-.14400E+01	-.17596E+01	.50200E+00	
.10000E+01	-.13127E+01	.87299E-01	.12991E-01	.43427E-02	.99080E-02	-.15513E+01	-.18571E+01	.47970E+00	

THETA= .52360E+00

R									
UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF	
.88000E+00	-.95347E+00	.76113E+00	.30015E+00	.43156E-01	.16837E-01	-.17075E+00	-.13074E+00	.71903E+00	
.89000E+00	-.95229E+00	.74094E+00	.28474E+00	.60884E-01	.21641E-01	-.26540E+00	-.22756E+00	.69261E+00	
.90000E+00	-.95055E+00	.72097E+00	.26731E+00	.73797E-01	.25289E-01	-.35730E+00	-.32159E+00	.66697E+00	
.91000E+00	-.94847E+00	.70117E+00	.24812E+00	.82268E-01	.27872E-01	-.44671E+00	-.41307E+00	.64206E+00	
.92000E+00	-.94666E+00	.68150E+00	.22741E+00	.86638E-01	.29470E-01	-.53387E+00	-.50225E+00	.61750E+00	
.93000E+00	-.94453E+00	.66193E+00	.20538E+00	.87216E-01	.30158E-01	-.61899E+00	-.58935E+00	.59416E+00	
.94000E+00	-.94229E+00	.64242E+00	.18222E+00	.86283E-01	.30004E-01	-.70227E+00	-.67456E+00	.57108E+00	
.95000E+00	-.93995E+00	.62294E+00	.15810E+00	.79095E-01	.29069E-01	-.78387E+00	-.759307E+00	.54852E+00	

.96000E+00 -.93752E+00 .60346E+00 .14589E+00 .13316E+00 .68887E-01 .27409E-01 -.86398E+00 -.84004E+00 .52642E+00  
 .97000E+00 -.93500E+00 .58395E+00 .14135E+00 .10755E+00 .56872E-01 .25076E-01 -.94274E+00 -.92063E+00 .50113E+00  
 .98000E+00 -.93240E+00 .56439E+00 .13679E+00 .81366E-01 .42244E-01 -.10203E+01 -.9998E+00 .48353E+00  
 .99000E+00 -.92971E+00 .54475E+00 .13222E+00 .54723E-01 .18572E-01 -.10967E+01 -.10782E+01 .46264E+00  
 .10000E+01 -.92696E+00 .52501E+00 .12762E+00 .27714E-01 .58509E-02 .14485E-01 -.11722E+01 -.11554E+01 .44210E+00  
 THETA= .69813E+00

.88000E+00 -.46660E+00 .86552E+00 .23482E+00 .21197E+00 .49075E-01 .21645E-01 -.29375E+00 .39814E+00 .63602E+00  
 .89000E+00 -.46586E+00 .84257E+00 .22876E+00 .20222E+00 .69234E-01 .27821E-01 -.33238E+00 .33291E+00 .61265E+00  
 .90000E+00 -.46505E+00 .81986E+00 .22277E+00 .19136E+00 .83918E-01 .32511E-01 -.36997E+00 .26950E+00 .58997E+00  
 .91000E+00 -.46416E+00 .79734E+00 .21683E+00 .17953E+00 .93552E-01 .35831E-01 -.40661E+00 .20775E+00 .56793E+00  
 .92000E+00 -.46321E+00 .77497E+00 .21093E+00 .16685E+00 .98522E-01 .37886E-01 -.44241E+00 .14750E+00 .54648E+00  
 .93000E+00 -.46220E+00 .75271E+00 .20507E+00 .15343E+00 .99179E-01 .38771E-01 -.47745E+00 .88621E-01 .52557E+00  
 .94000E+00 -.46114E+00 .73053E+00 .19922E+00 .13937E+00 .95843E-01 .38572E-01 -.51180E+00 .30980E-01 .50515E+00  
 .95000E+00 -.46002E+00 .70838E+00 .19339E+00 .12475E+00 .90807E-01 .37370E-01 -.54555E+00 .25539E-01 .48519E+00  
 .96000E+00 -.45886E+00 .68623E+00 .18755E+00 .10965E+00 .78336E-01 .35236E-01 -.57874E+00 .81042E-01 .46566E+00  
 .97000E+00 -.45766E+00 .66405E+00 .18171E+00 .94146E-01 .64672E-01 .32236E-01 -.61146E+00 .13563E+00 .44650E+00  
 .98000E+00 -.45641E+00 .64180E+00 .17585E+00 .78296E-01 .48039E-01 .28431E-01 -.64374E+00 .18439E+00 .42771E+00  
 .99000E+00 -.45512E+00 .61947E+00 .16998E+00 .62156E-01 .28637E-01 .23876E-01 -.67564E+00 .24241E+00 .40923E+00  
 .10000E+01 -.45382E+00 .59702E+00 .16407E+00 .45774E-01 .66534E-02 .18621E-01 -.70721E+00 .29476E+00 .39106E+00  
 THETA= .87266E+00

.88000E+00 .51940E-01 .86552E+00 .27985E+00 .11813E+00 .49075E-01 .25796E-01 -.42463E+00 .96096E+00 .53369E+00  
 .89000E+00 .51775E-01 .84257E+00 .27263E+00 .11440E+00 .59234E-01 .33156E-01 -.40366E+00 .92935E+00 .51407E+00  
 .90000E+00 .51607E-01 .81986E+00 .26549E+00 .11054E+00 .83918E-01 .38745E-01 -.38345E+00 .89852E+00 .49504E+00  
 .91000E+00 .51436E-01 .79734E+00 .25841E+00 .10654E+00 .93552E-01 .42702E-01 -.36394E+00 .86841E+00 .47655E+00  
 .92000E+00 .51262E-01 .77497E+00 .25138E+00 .10241E+00 .98522E-01 .45151E-01 -.34508E+00 .83895E+00 .45855E+00  
 .93000E+00 .51084E-01 .75271E+00 .24439E+00 .98147E-01 .99179E-01 .46205E-01 -.32682E+00 .81013E+00 .44103E+00  
 .94000E+00 .50902E-01 .73053E+00 .23742E+00 .93761E-01 .95843E-01 .45969E-01 -.30911E+00 .78180E+00 .42387E+00  
 .95000E+00 .50715E-01 .70838E+00 .23047E+00 .89253E-01 .88807E-01 .44536E-01 -.29192E+00 .75401E+00 .40713E+00  
 .96000E+00 .50522E-01 .68623E+00 .22352E+00 .84626E-01 .78336E-01 .41993E-01 -.27520E+00 .72667E+00 .39073E+00  
 .97000E+00 .50324E-01 .66405E+00 .21655E+00 .79884E-01 .64672E-01 .38418E-01 -.25892E+00 .69975E+00 .37466E+00  
 .98000E+00 .50119E-01 .64180E+00 .20958E+00 .75030E-01 .48039E-01 .33883E-01 -.24303E+00 .67322E+00 .35889E+00  
 .99000E+00 .49908E-01 .61947E+00 .20257E+00 .70065E-01 .28637E-01 .28455E-01 -.22753E+00 .64704E+00 .34339E+00  
 .10000E+01 .49690E-01 .59702E+00 .19553E+00 .64993E-01 .66534E-02 .22192E-01 -.21236E+00 .62117E+00 .32814E+00  
 THETA= .10472E+01

.88000E+00 .53921E+00 .76113E+00 .31637E+00 .29942E-01 .43156E-01 .29163E-01 -.54763E+00 .14898E+01 .41513E+00  
 .89000E+00 .53820E+00 .74094E+00 .30821E+00 .31883E-01 .60884E-01 .37483E-01 -.47064E+00 .14898E+01 .39988E+00  
 .90000E+00 .53711E+00 .72097E+00 .30014E+00 .34593E-01 .73797E-01 .43802E-01 -.39612E+00 .14898E+01 .38508E+00  
 .91000E+00 .53594E+00 .70117E+00 .29214E+00 .37952E-01 .82268E-01 .48275E-01 -.32384E+00 .14898E+01 .37059E+00  
 .92000E+00 .53471E+00 .68150E+00 .28419E+00 .41852E-01 .86638E-01 .51044E-01 -.25362E+00 .14887E+01 .35669E+00  
 .93000E+00 .53341E+00 .66193E+00 .27629E+00 .46199E-01 .87216E-01 .52235E-01 -.18528E+00 .14881E+01 .34304E+00  
 .94000E+00 .53206E+00 .64242E+00 .26841E+00 .50906E-01 .84283E-01 .51968E-01 -.11855E+00 .14873E+01 .32971E+00  
 .95000E+00 .53065E+00 .62294E+00 .26055E+00 .55899E-01 .78095E-01 .50348E-01 -.53592E+00 .14865E+01 .31669E+00  
 .96000E+00 .52918E+00 .60346E+00 .25269E+00 .61111E-01 .68887E-01 .47473E-01 .10038E-01 .14857E+01 .30394E+00  
 .97000E+00 .52767E+00 .58395E+00 .24482E+00 .66482E-01 .56872E-01 .43432E-01 .72365E-01 .14848E+01 .29143E+00  
 .98000E+00 .52610E+00 .56439E+00 .23693E+00 .71960E-01 .42244E-01 .38306E-01 .13350E+00 .14838E+01 .27917E+00  
 .99000E+00 .52449E+00 .54475E+00 .22901E+00 .77497E-01 .25183E-01 .32168E-01 .19356E+00 .14828E+01 .26711E+00  
 .10000E+01 .52283E+00 .52501E+00 .22105E+00 .83053E-01 .58509E-02 .25088E-01 .25264E+00 .14819E+01 .25524E+00  
 THETA= .12217E+01

.88000E+00 .93644E+00 .56493E+00 .34329E+00 .41945E-01 .32031E-01 .31643E-01 -.64789E+00 .19210E+01 .28397E+00  
 .89000E+00 .93473E+00 .54995E+00 .33443E+00 .35389E-01 .45189E-01 .40672E-01 -.52525E+00 .15467E+01 .27353E+00  
 .90000E+00 .93289E+00 .53512E+00 .32567E+00 .27321E-01 .54774E-01 .47528E-01 -.40644E+00 .19715E+01 .26341E+00  
 .91000E+00 .93091E+00 .52043E+00 .31699E+00 .17963E-01 .61062E-01 .52382E-01 -.29115E+00 .19953E+01 .25357E+00

THETA =	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.82000E+00	.92882E+00	.50583E+00	.30836E+00	-.75139E-02	.64305E-01	.55395E-01	-.17906E+00	.20184E+01	.24395E+00	
.83000E+00	.92651E+00	.49130E+00	.29979E+00	.38498E-02	.64734E-01	.56579E-01	-.69890E-01	.20408E+01	.23465E+00	
.84000E+00	.92430E+00	.47682E+00	.29124E+00	.15971E-01	.62557E-01	.56389E-01	.36616E-01	.20625E+01	.22554E+00	
.85000E+00	.92189E+00	.46236E+00	.28271E+00	.28710E-01	.57965E-01	.54631E-01	.14070E+00	.20837E+01	.21663E+00	
.86000E+00	.91939E+00	.44790E+00	.27418E+00	.41342E-01	.51130E-01	.51512E-01	.42257E+00	.21044E+01	.20790E+00	
.87000E+00	.91680E+00	.43343E+00	.26564E+00	.55557E-01	.42212E-01	.47127E-01	.34243E+00	.21247E+01	.19935E+00	
.88000E+00	.91413E+00	.41891E+00	.25708E+00	.69457E-01	.31355E-01	.41564E-01	.44046E+00	.21446E+01	.19096E+00	
.89000E+00	.91137E+00	.40433E+00	.24849E+00	.83556E-01	.18692E-01	.34905E-01	.53684E+00	.21642E+01	.18271E+00	
.90000E+00	.90854E+00	.38968E+00	.23985E+00	.97775E-01	.43427E-02	.27222E-01	.63172E+00	.21835E+01	.17460E+00	
THETA =	.13963E+01									
.88000E+00	.11957E+01	.30059E+00	.35977E+00	-.88866E-01	.17044E-01	.33163E-01	-.71334E+00	.22024E+01	.14417E+00	
.89000E+00	.11936E+01	.29262E+00	.35048E+00	-.79298E-01	.24045E-01	.42624E-01	-.56089E+00	.22449E+01	.13888E+00	
.90000E+00	.11912E+01	.28473E+00	.34130E+00	-.67732E-01	.29145E-01	.49810E-01	-.41318E+00	.22860E+01	.13374E+00	
.91000E+00	.11887E+01	.27691E+00	.33220E+00	-.54459E-01	.32490E-01	.54897E-01	-.26981E+00	.23257E+01	.12874E+00	
.92000E+00	.11861E+01	.26914E+00	.32317E+00	-.39735E-01	.34216E-01	.58045E-01	-.13039E+00	.23641E+01	.12388E+00	
.93000E+00	.11833E+01	.26141E+00	.31418E+00	-.23791E-01	.34444E-01	.59400E-01	-.54232E-02	.24015E+01	.11914E+00	
.94000E+00	.11803E+01	.25371E+00	.30522E+00	-.68315E-02	.33286E-01	.59096E-01	.13796E+00	.24379E+01	.11451E+00	
.95000E+00	.11773E+01	.24602E+00	.29628E+00	.10963E-01	.30842E-01	.57254E-01	.26751E+00	.24735E+01	.10998E+00	
.96000E+00	.11741E+01	.23832E+00	.28735E+00	.29430E-01	.27206E-01	.53985E-01	.39434E+00	.25083E+01	.10556E+00	
.97000E+00	.11709E+01	.23062E+00	.27840E+00	.48426E-01	.22460E-01	.49389E-01	.51870E+00	.25424E+01	.10121E+00	
.98000E+00	.11674E+01	.22290E+00	.26943E+00	.67824E-01	.16684E-01	.43560E-01	.64081E+00	.25759E+01	.96953E-01	
.99000E+00	.11639E+01	.21514E+00	.26042E+00	.87511E-01	.99456E-02	.36580E-01	.76090E+00	.26089E+01	.92765E-01	
.10000E+01	.11603E+01	.20734E+00	.25137E+00	.10738E+00	.23107E-02	.28529E-01	.87914E+00	.26415E+01	.89645E-01	

THETA = .15708E+01

THETA =	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	.12858E+01	.46944E-13	.36532E+00	-.10516E+00	.26617E-14	.33674E-01	-.73607E+00	.23001E+01	.22174E-13	
.89000E+00	.12834E+01	.45699E-13	.35589E+00	-.94547E-01	.37551E-14	.33674E-01	-.57326E+00	.23485E+01	.21359E-13	
.90000E+00	.12809E+01	.44467E-13	.34657E+00	-.81767E-01	.45515E-14	.50579E-01	-.41552E+00	.23952E+01	.20568E-13	
.91000E+00	.12782E+01	.43245E-13	.33733E+00	-.67133E-01	.50740E-14	.55744E-01	-.26240E+00	.24404E+01	.19800E-13	
.92000E+00	.12756E+01	.42032E-13	.32815E+00	-.50926E-01	.53435E-14	.58940E-01	-.11349E+00	.24842E+01	.19052E-13	
.93000E+00	.12724E+01	.40825E-13	.31903E+00	-.33391E-01	.53792E-14	.60316E-01	.31579E-01	.25268E+01	.18323E-13	
.94000E+00	.12692E+01	.39622E-13	.30993E+00	-.14751E-01	.51983E-14	.60008E-01	.17316E+00	.25683E+01	.17611E-13	
.95000E+00	.12660E+01	.38420E-13	.30085E+00	.47994E-02	.48166E-14	.58137E-01	.31155E+00	.26088E+01	.16915E-13	
.96000E+00	.12625E+01	.37219E-13	.29178E+00	.25085E-01	.42487E-14	.54818E-01	.44705E+00	.26485E+01	.16234E-13	
.97000E+00	.12590E+01	.36016E-13	.28269E+00	.45950E-01	.35076E-14	.50151E-01	.57991E+00	.26875E+01	.15666E-13	
.98000E+00	.12554E+01	.34810E-13	.27359E+00	.67257E-01	.26055E-14	.44232E-01	.71039E+00	.27257E+01	.14911E-13	
.99000E+00	.12518E+01	.33598E-13	.26444E+00	.88844E-01	.15532E-14	.37145E-01	.83871E+00	.27434E+01	.14267E-13	
.10000E+01	.12477E+01	.32381E-13	.25524E+00	.11072E+00	.36086E-15	.28969E-01	.96507E+00	.28005E+01	.13633E-13	

THETA = .17453E+01

THETA =	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	.11957E+01	.30059E+00	.35977E+00	-.88866E-01	.17044E-01	.33163E-01	-.71334E+00	.22024E+01	.14417E+00	
.89000E+00	.11936E+01	.29262E+00	.35048E+00	-.79298E-01	.24045E-01	.42624E-01	-.56089E+00	.22449E+01	.13888E+00	
.90000E+00	.11912E+01	.28473E+00	.34130E+00	-.67732E-01	.29145E-01	.49810E-01	-.41318E+00	.22860E+01	.13374E+00	
.91000E+00	.11887E+01	.27691E+00	.33220E+00	-.54459E-01	.32490E-01	.54897E-01	-.26981E+00	.23257E+01	.12874E+00	
.92000E+00	.11861E+01	.26914E+00	.32317E+00	-.39735E-01	.34216E-01	.58045E-01	-.13039E+00	.23641E+01	.12388E+00	
.93000E+00	.11833E+01	.26141E+00	.31418E+00	-.23791E-01	.34444E-01	.59400E-01	-.54232E-02	.24015E+01	.11914E+00	
.94000E+00	.11803E+01	.25371E+00	.30522E+00	-.68315E-02	.33286E-01	.59096E-01	.13796E+00	.24379E+01	.11451E+00	
.95000E+00	.11773E+01	.24602E+00	.29628E+00	.10963E-01	.30842E-01	.57254E-01	.26751E+00	.24735E+01	.10998E+00	
.96000E+00	.11741E+01	.23832E+00	.28735E+00	.29430E-01	.27206E-01	.53985E-01	.39434E+00	.25083E+01	.10556E+00	
.97000E+00	.11708E+01	.23062E+00	.27840E+00	.48426E-01	.22460E-01	.49389E-01	.51870E+00	.25424E+01	.10121E+00	
.98000E+00	.11674E+01	.22290E+00	.26943E+00	.67824E-01	.16684E-01	.43560E-01	.64081E+00	.25759E+01	.96953E-01	
.99000E+00	.11639E+01	.21514E+00	.26042E+00	.87511E-01	.99456E-02	.36580E-01	.76090E+00	.26089E+01	.92765E-01	
.10000E+01	.11603E+01	.20734E+00	.25137E+00	.10738E+00	.23107E-02	.28529E-01	.87914E+00	.26415E+01	.89645E-01	

THETA = .19199E+01

THETA =	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	.11957E+01	.30059E+00	.35977E+00	-.88866E-01	.17044E-01	.33163E-01	-.71334E+00	.22024E+01	.14417E+00	
.89000E+00	.11936E+01	.29262E+00	.35048E+00	-.79298E-01	.24045E-01	.42624E-01	-.56089E+00	.22449E+01	.13888E+00	
.90000E+00	.11912E+01	.28473E+00	.34130E+00	-.67732E-01	.29145E-01	.49810E-01	-.41318E+00	.22860E+01	.13374E+00	
.91000E+00	.11887E+01	.27691E+00	.33220E+00	-.54459E-01	.32490E-01	.54897E-01	-.26981E+00	.23257E+01	.12874E+00	
.92000E+00	.11861E+01	.26914E+00	.32317E+00	-.39735E-01	.34216E-01	.58045E-01	-.13039E+00	.23641E+01	.12388E+00	
.93000E+00	.11833E+01	.26141E+00	.31418E+00	-.23791E-01	.34444E-01	.59400E-01	-.54232E-02	.24015E+01	.11914E+00	
.94000E+00	.11803E+01	.25371E+00	.30522E+00	-.68315E-02	.33286E-01	.59096E-01	.13796E+00	.24379E+01	.11451E+00	
.95000E+00	.11773E+01	.24602E+00	.29628E+00	.10963E-01	.30842E-01	.57254E-01	.26751E+00	.24735E+01	.10998E+00	
.96000E+00	.11741E+01	.23832E+00	.28735E+00	.29430E-01	.27206E-01	.53985E-01	.39434E+00	.25083E+01	.10556E+00	
.97000E+00	.11708E+01	.23062E+00	.27840E+00	.48426E-01	.22460E-01	.49389E-01	.51870E+00	.25424E+01	.10121E+00	
.98000E+00	.11674E+01	.22290E+00	.26943E+00	.67824E-01	.16684E-01	.43560E-01	.64081E+00	.25759E+01	.96953E-01	
.99000E+00	.11639E+01	.21514E+00	.26042E+00	.87511E-01	.99456E-02	.36580E-01	.76090E+00	.26089E+01	.92765E-01	
.10000E+01	.11603E+01	.20734E+00	.25137E+00	.10738E+00	.23107E-02	.28529E-01	.87914E+00	.26415E+01	.89645E-01	

C94

.88000E+00	.93644E+00	-.56493E+00	.34329E+00	-.41945E-01	-.32031E-01	.31643E-01	-.64789E+00	.19210E+01	-.28307E+00
.89000E+00	.93473E+00	-.54995E+00	.33443E+00	-.35389E-01	-.45189E-01	.40672E-01	-.52525E+00	.19467E+01	-.27353E+00
.90000E+00	.93289E+00	-.53512E+00	.32567E+00	-.27321E-01	-.54774E-01	.47528E-01	-.40644E+00	.19715E+01	-.26341E+00
.91000E+00	.93091E+00	-.52043E+00	.31699E+00	-.17963E-01	-.61062E-01	.52382E-01	-.29115E+00	.19953E+01	-.25357E+00
.92000E+00	.92882E+00	-.50583E+00	.30836E+00	-.75139E-02	-.64305E-01	.55385E-01	-.17906E+00	.20184E+01	-.24399E+00
.93000E+00	.92661E+00	-.49130E+00	.29979E+00	.38498E-02	-.64734E-01	.56679E-01	-.69890E-01	.20408E+01	-.23465E+00
.94000E+00	.92430E+00	-.47682E+00	.29124E+00	.15971E-01	-.62557E-01	.56389E-01	.36616E-01	.20625E+01	-.22554E+00
.95000E+00	.92189E+00	-.46236E+00	.28271E+00	.28710E-01	-.57965E-01	.54631E-01	.14070E+00	.20837E+01	-.21663E+00
.96000E+00	.91939E+00	-.44790E+00	.27418E+00	.41942E-01	-.51130E-01	.51512E-01	.24257E+00	.21044E+01	-.20790E+00
.97000E+00	.91680E+00	-.43343E+00	.26564E+00	.55557E-01	-.42212E-01	.47127E-01	.34243E+00	.21247E+01	-.19935E+00
.98000E+00	.91413E+00	-.41891E+00	.25708E+00	.69457E-01	-.31355E-01	.41564E-01	.44046E+00	.21446E+01	-.19096E+00
.99000E+00	.91137E+00	-.40433E+00	.24849E+00	.83556E-01	-.18692E-01	.34905E-01	.53684E+00	.21642E+01	-.18271E+00
.10000E+01	.90854E+00	-.38968E+00	.23985E+00	.97775E-01	-.43427E-02	.27222E-01	.63172E+00	.21835E+01	-.17460E+00



FEE= .12217E+01

THETA= 0.

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.8800E+00	-.1700E+01	0.	.4352E+00	0.	0.	-.2727E+00	-.1196E+01	-.6162E+00
.8900E+00	-.1697E+01	0.	.4111E+00	0.	0.	-.8291E+00	-.1331E+01	-.5936E+00
.9000E+00	-.1694E+01	0.	.3836E+00	0.	0.	-.1013E+00	-.1463E+01	-.5716E+00
.9100E+00	-.1691E+01	0.	.3532E+00	0.	0.	-.2803E+00	-.1592E+01	-.5502E+00
.9200E+00	-.1687E+01	0.	.3201E+00	0.	0.	-.4548E+00	-.1716E+01	-.5294E+00
.9300E+00	-.1683E+01	0.	.2849E+00	0.	0.	-.6250E+00	-.1838E+01	-.5092E+00
.9400E+00	-.1679E+01	0.	.2478E+00	0.	0.	-.7914E+00	-.1958E+01	-.4894E+00
.9500E+00	-.1675E+01	0.	.2092E+00	0.	0.	-.9544E+00	-.2074E+01	-.4701E+00
.9600E+00	-.1670E+01	0.	.1691E+00	0.	0.	-.1114E+01	-.2189E+01	-.4511E+00
.9700E+00	-.1666E+01	0.	.1280E+00	0.	0.	-.1271E+01	-.2302E+01	-.4326E+00
.9800E+00	-.1661E+01	0.	.8606E+00	0.	0.	-.1425E+01	-.2413E+01	-.4144E+00
.9900E+00	-.1656E+01	0.	.4333E+00	0.	0.	-.1577E+01	-.2522E+01	-.3965E+00
.1000E+01	-.1651E+01	0.	.4395E+00	0.	0.	-.1727E+01	-.2630E+01	-.3789E+00

THETA= .17453E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.8800E+00	-.1604E+01	-.4708E+01	.4194E+00	-.1881E+01	-.4340E+02	-.2489E+00	-.1091E+01	-.6068E+00
.8900E+00	-.1602E+01	-.4587E+01	.3964E+00	-.2631E+01	-.5578E+02	-.7016E+01	-.1221E+01	-.5845E+00
.9000E+00	-.1599E+01	-.4466E+01	.3702E+00	-.3180E+01	-.6519E+02	-.1033E+01	-.1347E+01	-.5629E+00
.9100E+00	-.1595E+01	-.4347E+01	.3412E+00	-.3541E+01	-.7184E+02	-.2720E+01	-.1469E+01	-.5419E+00
.9200E+00	-.1592E+01	-.4229E+01	.3098E+00	-.3731E+01	-.7596E+02	-.4364E+01	-.1588E+01	-.5214E+00
.9300E+00	-.1588E+01	-.4111E+01	.2762E+00	-.3761E+01	-.7774E+02	-.5968E+01	-.1705E+01	-.5014E+00
.9400E+00	-.1584E+01	-.3994E+01	.2409E+00	-.3643E+01	-.7734E+02	-.7536E+01	-.1818E+01	-.4820E+00
.9500E+00	-.1580E+01	-.3877E+01	.2041E+00	-.3387E+01	-.7493E+02	-.9071E+01	-.1930E+01	-.4629E+00
.9600E+00	-.1576E+01	-.3760E+01	.1661E+00	-.3008E+01	-.7065E+02	-.1057E+01	-.2039E+01	-.4443E+00
.9700E+00	-.1572E+01	-.3643E+01	.1270E+00	-.2509E+01	-.6438E+02	-.1205E+01	-.2147E+01	-.4260E+00
.9800E+00	-.1568E+01	-.3526E+01	.8704E+00	-.1903E+01	-.5700E+02	-.1351E+01	-.2253E+01	-.4081E+00
.9900E+00	-.1563E+01	-.3408E+01	.4638E+00	-.1189E+01	-.4787E+02	-.1494E+01	-.2358E+01	-.3904E+00
.1000E+01	-.1558E+01	-.3289E+01	.5195E+00	-.3832E+02	-.3733E+02	-.1635E+01	-.2461E+01	-.3731E+00

THETA= .34907E+00

UBAR	AR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.8800E+00	-.1329E+01	-.9273E+01	.3738E+00	-.3535E+01	-.8548E+02	-.1805E+00	-.7911E+01	-.5790E+00
.8900E+00	-.1326E+01	-.9034E+01	.3540E+00	-.4946E+01	-.1098E+01	-.3646E+01	-.9028E+01	-.5578E+00
.9000E+00	-.1324E+01	-.8797E+01	.3316E+00	-.5976E+01	-.1284E+01	-.1093E+00	-.1011E+01	-.5371E+00
.9100E+00	-.1321E+01	-.8563E+01	.3067E+00	-.6656E+01	-.1415E+01	-.2481E+00	-.1116E+01	-.5170E+00
.9200E+00	-.1318E+01	-.8330E+01	.2799E+00	-.7012E+01	-.1496E+01	-.3838E+00	-.1219E+01	-.4975E+00
.9300E+00	-.1315E+01	-.8098E+01	.2512E+00	-.7068E+01	-.1531E+01	-.5139E+00	-.1319E+01	-.4785E+00
.9400E+00	-.1312E+01	-.7867E+01	.2211E+00	-.6848E+01	-.1523E+01	-.6444E+00	-.1418E+01	-.4599E+00
.9500E+00	-.1309E+01	-.7637E+01	.1897E+00	-.6370E+01	-.1475E+01	-.7708E+00	-.1514E+01	-.4417E+00
.9600E+00	-.1305E+01	-.7407E+01	.1572E+00	-.5654E+01	-.1391E+01	-.8948E+00	-.1608E+01	-.4239E+00
.9700E+00	-.1302E+01	-.7176E+01	.1239E+00	-.4716E+01	-.1273E+01	-.1016E+01	-.1701E+01	-.4065E+00
.9800E+00	-.1298E+01	-.6945E+01	.8984E+00	-.3572E+01	-.1122E+01	-.1136E+01	-.1793E+01	-.3894E+00
.9900E+00	-.1294E+01	-.6712E+01	.5516E+00	-.2235E+01	-.9429E+02	-.1254E+01	-.1883E+01	-.3726E+00
.1000E+01	-.1291E+01	-.6479E+01	.2002E+00	-.7202E+02	-.7354E+02	-.1371E+01	-.1972E+01	-.3560E+00

THETA= .52360E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.8800E+00	-.9066E+00	-.1355E+00	.3039E+00	-.4763E+01	-.1249E+01	-.7572E+01	-.3306E+00	-.5336E+00
.8900E+00	-.9051E+00	-.1320E+00	.2891E+00	-.6664E+01	-.1606E+01	-.2276E+01	-.4148E+00	-.5140E+00
.9000E+00	-.9034E+00	-.1286E+00	.2724E+00	-.8052E+01	-.1877E+01	-.1183E+00	-.4967E+00	-.4950E+00
.9100E+00	-.9016E+00	-.1251E+00	.2539E+00	-.8969E+01	-.2068E+01	-.2114E+00	-.5763E+00	-.4765E+00
.9200E+00	-.8996E+00	-.1217E+00	.2341E+00	-.9447E+01	-.2187E+01	-.3021E+00	-.6540E+00	-.4585E+00
.9300E+00	-.8976E+00	-.1184E+00	.2129E+00	-.9524E+01	-.2234E+01	-.3906E+00	-.7298E+00	-.4410E+00
.9400E+00	-.8954E+00	-.1150E+00	.1907E+00	-.9226E+01	-.2227E+01	-.4772E+00	-.8040E+00	-.4238E+00
.9500E+00	-.8931E+00	-.1116E+00	.1676E+00	-.8582E+01	-.2157E+01	-.5621E+00	-.8768E+00	-.4071E+00



.96000E+00 -.89083E+00 .64227E+00 .10828E+00 .14376E+00 .76179E-01 .20344E-01 -.64543E+00 -.94829E+00 .39073E+00  
 .97000E+00 -.88839E+00 .62156E+00 .10491E+00 .11922E+00 .63543E-01 .18612E-01 -.72730E+00 -.10185E+01 .37466E+00  
 .98000E+00 -.88588E+00 .60078E+00 .94139E-01 .94139E-01 .48128E-01 .16415E-01 -.80789E+00 -.10877E+01 .35889E+00  
 .99000E+00 -.88330E+00 .57993E+00 .98136E-01 .68622E-01 .30124E-01 .13785E-01 -.88733E+00 -.11560E+01 .34339E+00  
 .10000E+00 -.88064E+00 .55896E+00 .94725E-01 .42755E-01 .97045E-02 .10751E-01 -.96574E+00 -.12234E+01 .32814E+00

THETA = .69813E+00

.88000E+00 -.38857E+00 .92079E+00 .17429E+00 .21829E+00 .54169E-01 .16066E-01 -.52875E-01 .23427E+00 .47207E+00  
 .89000E+00 -.38790E+00 .89640E+00 .16979E+00 .20950E+00 .75781E-01 .20650E-01 -.91740E-01 .18368E+00 .45472E+00  
 .90000E+00 -.38717E+00 .87228E+00 .16535E+00 .19977E+00 .91569E-01 .24131E-01 -.2055E+00 .13448E+00 .43789E+00  
 .91000E+00 -.38638E+00 .84837E+00 .16094E+00 .18921E+00 .10198E+00 .26595E-01 .16642E+00 .86539E-01 .42153E+00  
 .92000E+00 -.38553E+00 .82461E+00 .15656E+00 .17791E+00 .10744E+00 .28120E-01 .20242E+00 .39738E-01 .40561E+00  
 .93000E+00 -.38464E+00 .80097E+00 .15221E+00 .16598E+00 .10830E+00 .28777E-01 .23765E+00 .60272E-02 .39009E+00  
 .94000E+00 -.38369E+00 .77741E+00 .14787E+00 .15350E+00 .10492E+00 .28629E-01 .27218E+00 .50856E-01 .37494E+00  
 .95000E+00 -.38271E+00 .75389E+00 .14354E+00 .14053E+00 .97601E-01 .27737E-01 .30609E+00 .94838E-01 .36012E+00  
 .96000E+00 -.38169E+00 .73036E+00 .13921E+00 .12716E+00 .86628E-01 .26153E-01 .33944E+00 .13806E+00 .34562E+00  
 .97000E+00 -.38063E+00 .70681E+00 .13487E+00 .11343E+00 .72259E-01 .23927E-01 .37228E+00 .18059E+00 .33141E+00  
 .98000E+00 -.37954E+00 .68319E+00 .13032E+00 .99406E-01 .54729E-01 .21103E-01 .40468E+00 .22250E+00 .31745E+00  
 .99000E+00 -.37842E+00 .65947E+00 .12616E+00 .85126E-01 .34256E-01 .17722E-01 .43667E+00 .26385E+00 .30374E+00  
 .10000E+00 -.37727E+00 .63563E+00 .12178E+00 .70633E-01 .11036E-01 .13821E-01 .46832E+00 .30472E+00 .29025E+00

THETA = .87266E+00

.88000E+00 .16277E+00 .92079E+00 .20771E+00 .12710E+00 .54169E-01 .19146E-01 -.18973E+00 .83542E+00 .39612E+00  
 .89000E+00 .16250E+00 .89640E+00 .20235E+00 .12475E+00 .75781E-01 .24609E-01 -.16514E+00 .82066E+00 .38156E+00  
 .90000E+00 .16222E+00 .87228E+00 .19705E+00 .12248E+00 .91569E-01 .28758E-01 -.14143E+00 .80619E+00 .36744E+00  
 .91000E+00 .16191E+00 .84837E+00 .19190E+00 .12028E+00 .10198E+00 .31695E-01 .11851E+00 .79198E+00 .35371E+00  
 .92000E+00 .16159E+00 .82461E+00 .18658E+00 .11812E+00 .10744E+00 .33512E-01 .96330E-01 .77801E+00 .34035E+00  
 .93000E+00 .16125E+00 .80097E+00 .18139E+00 .11597E+00 .10830E+00 .34295E-01 .74820E-01 .76426E+00 .32732E+00  
 .94000E+00 .16089E+00 .77741E+00 .17622E+00 .11383E+00 .10492E+00 .34119E-01 .53928E-01 .75071E+00 .31461E+00  
 .95000E+00 .16052E+00 .75389E+00 .17106E+00 .11168E+00 .97601E-01 .33056E-01 .33602E-01 .73736E+00 .30218E+00  
 .96000E+00 .16013E+00 .73036E+00 .16590E+00 .10950E+00 .86628E-01 .31168E-01 .13798E+00 .72418E+00 .29001E+00  
 .97000E+00 .15972E+00 .70681E+00 .16073E+00 .10728E+00 .72259E-01 .28515E-01 .55281E-02 .71116E+00 .27808E+00  
 .98000E+00 .15930E+00 .68319E+00 .15555E+00 .10501E+00 .74729E-01 .25149E-01 .24416E-01 .69828E+00 .26638E+00  
 .99000E+00 .15886E+00 .65947E+00 .15035E+00 .10269E+00 .34256E-01 .21120E-01 .42902E-01 .68555E+00 .25487E+00  
 .10000E+00 .15841E+00 .63563E+00 .14513E+00 .10030E+00 .11036E-01 .16471E-01 .61019E-01 .67294E+00 .24355E+00

THETA = .10472E+01

.88000E+00 .68086E+00 .80972E+00 .23492E+00 .41411E-01 .47635E-01 .21645E-01 -.31832E+00 .14003E+01 .30812E+00  
 .89000E+00 .67972E+00 .78829E+00 .22876E+00 .45103E-01 .66641E-01 .27821E-01 -.23412E+00 .14192E+01 .29680E+00  
 .90000E+00 .67847E+00 .76707E+00 .22277E+00 .49855E-01 .80525E-01 .32511E-01 -.15259E+00 .14374E+01 .28581E+00  
 .91000E+00 .67714E+00 .74604E+00 .21683E+00 .55510E-01 .89683E-01 .35831E-01 -.73499E+00 .14549E+01 .27514E+00  
 .92000E+00 .67572E+00 .72515E+00 .21093E+00 .51926E-01 .94479E-01 .37886E-01 .33613E-02 .14718E+01 .26474E+00  
 .93000E+00 .67421E+00 .70436E+00 .20507E+00 .68979E-01 .95240E-01 .38771E-01 .78190E-01 .14881E+01 .25461E+00  
 .94000E+00 .67263E+00 .68364E+00 .19922E+00 .76555E-01 .92265E-01 .38572E-01 .15116E+00 .15039E+01 .24472E+00  
 .95000E+00 .67098E+00 .66296E+00 .19339E+00 .84557E-01 .85829E-01 .37370E-01 .22245E+00 .15194E+01 .22505E+00  
 .96000E+00 .66926E+00 .64227E+00 .18755E+00 .92895E-01 .76179E-01 .35236E-01 .29220E+00 .15344E+01 .22559E+00  
 .97000E+00 .66748E+00 .62156E+00 .18171E+00 .10149E+00 .63543E-01 .32236E-01 .36055E+00 .15491E+01 .21631E+00  
 .98000E+00 .66564E+00 .60078E+00 .17585E+00 .11028E+00 .48128E-01 .28431E-01 .42763E+00 .15635E+01 .20720E+00  
 .99000E+00 .66374E+00 .57993E+00 .16998E+00 .11919E+00 .30124E-01 .23876E-01 .49356E+00 .15777E+01 .19825E+00  
 .10000E+00 .66178E+00 .55896E+00 .16407E+00 .12818E+00 .97045E-02 .18621E-01 .55844E+00 .15916E+01 .18945E+00

THETA = .12217E+01

.88000E+00 .11032E+01 .60100E+00 .25480E+00 .28442E-01 .35356E-01 .23487E-01 -.42316E+00 .18608E+01 .21077E+00  
 .89000E+00 .11014E+01 .58509E+00 .24822E+00 .19824E-01 .49463E-01 .30188E-01 -.29335E+00 .19072E+01 .20302E+00  
 .90000E+00 .10993E+01 .56934E+00 .24172E+00 .93510E-02 .59768E-01 .35277E-01 -.16169E+00 .19520E+01 .19551E+00  
 .91000E+00 .10972E+01 .55373E+00 .23527E+00 .27099E-02 .66565E-01 .38879E-01 -.36804E-01 .19953E+01 .18820E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
92000E+00	53823E+00	22888E+00	16121E-01	70125E-01	41109E-01	84630E-01	20373E+01	18110E+00
93000E+00	52280E+00	22251E+00	30670E-01	70689E-01	42069E-01	20292E+00	20782E+01	17417E+00
94000E+00	50742E+00	21617E+00	46169E-01	68482E-01	41853E-01	31836E+00	21180E+01	16740E+00
95000E+00	49206E+00	20984E+00	62450E-01	63705E-01	40549E-01	43119E+00	21569E+01	16079E+00
96000E+00	47671E+00	20351E+00	79363E-01	56542E-01	38233E-01	54165E+00	21949E+01	15431E+00
97000E+00	46134E+00	19717E+00	96777E-01	47163E-01	34799E-01	64997E+00	22322E+01	14797E+00
98000E+00	44592E+00	19081E+00	11457E+00	35722E-01	30850E-01	75633E+00	22689E+01	14174E+00
99000E+00	43044E+00	18444E+00	13265E+00	22359E-01	25907E-01	86093E+00	23050E+01	13561E+00
10000E+01	41488E+00	17802E+00	15090E+00	72029E-02	20205E-01	96393E+00	23406E+01	12959E+00
THETA= .13963E+01								
UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
88000E+00	31979E+00	26703E+00	74035E-01	18813E-01	24614E-01	49158E+00	21614E+01	10701E+00
89000E+00	31132E+00	26014E+00	62202E-01	26319E-01	31637E-01	32705E+00	22257E+01	10308E+00
90000E+00	30294E+00	25332E+00	47995E-01	31802E-01	36970E-01	16762E+00	22878E+01	99262E-01
91000E+00	29463E+00	24657E+00	31753E-01	35419E-01	40746E-01	12853E-01	23480E+01	95554E-01
92000E+00	28638E+00	23986E+00	13777E-01	37313E-01	43082E-01	13767E+00	24064E+01	91945E-01
93000E+00	27817E+00	23319E+00	56660E-02	37413E-01	44088E-01	28434E+00	24633E+01	88426E-01
94000E+00	26999E+00	22655E+00	26336E-01	36438E-01	43863E-01	42749E+00	25188E+01	84902E-01
95000E+00	26182E+00	21991E+00	48020E-01	33897E-01	42496E-01	56743E+00	25730E+01	81634E-01
96000E+00	25365E+00	21328E+00	70531E-01	30086E-01	40069E-01	70447E+00	26260E+01	78346E-01
97000E+00	24547E+00	20663E+00	93699E-01	25095E-01	36558E-01	83887E+00	26781E+01	75124E-01
98000E+00	23727E+00	19997E+00	11738E+00	19007E-01	32331E-01	97088E+00	27293E+01	71961E-01
99000E+00	22903E+00	19329E+00	14143E+00	11897E-01	27151E-01	11007E+01	27797E+01	68853E-01
10000E+01	22075E+00	18657E+00	16574E+00	38326E-02	21175E-01	12286E+01	28294E+01	65795E-01
THETA= .15708E+01								
UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
83000E+00	49941E-13	27115E+00	89869E-01	29380E-14	24994E-01	51535E+00	22658E+01	1648E-13
84000E+00	48618E-13	26415E+00	76920E-01	41102E-14	32125E-01	33980E+00	23363E+01	15853E-13
85000E+00	47310E-13	25723E+00	61416E-01	49665E-14	37541E-01	16969E+00	24044E+01	15266E-13
86000E+00	46013E-13	25037E+00	43722E-01	55313E-14	41374E-01	45348E-02	24705E+01	14696E-13
87000E+00	44725E-13	24356E+00	24160E-01	58271E-14	43747E-01	15610E+00	25346E+01	14141E-13
88000E+00	43442E-13	23679E+00	30178E-02	58740E-14	44768E-01	31261E+00	25971E+01	13600E-13
89000E+00	42165E-13	23004E+00	19448E-01	56905E-14	44539E-01	46538E+00	26579E+01	13071E-13
90000E+00	40889E-13	22330E+00	43009E-01	52936E-14	43151E-01	61475E+00	27175E+01	12555E-13
91000E+00	39613E-13	21657E+00	67463E-01	46984E-14	40587E-01	76102E+00	27758E+01	12049E-13
92000E+00	38335E-13	20982E+00	92630E-01	39191E-14	37223E-01	90448E+00	28330E+01	11554E-13
93000E+00	37054E-13	20306E+00	11335E+00	29684E-14	32830E-01	10454E+01	28892E+01	11067E-13
94000E+00	35768E-13	19627E+00	14443E+00	18579E-14	27570E-01	11840E+01	29445E+01	10589E-13
95000E+01	34475E-13	18945E+00	17089E+00	59853E-15	21502E-01	13205E+01	29991E+01	10119E-13
THETA= .17453E+01								
UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
83000E+00	31979E+00	26703E+00	74035E-01	18813E-01	24614E-01	49158E+00	21614E+01	10701E+00
84000E+00	31132E+00	26014E+00	62202E-01	26319E-01	31637E-01	32705E+00	22257E+01	10308E+00
85000E+00	30294E+00	25332E+00	47995E-01	31802E-01	36970E-01	16762E+00	22878E+01	99262E-01
86000E+00	29463E+00	24657E+00	31753E-01	35419E-01	40746E-01	12853E-01	23480E+01	95554E-01
87000E+00	28638E+00	23986E+00	13777E-01	37313E-01	43082E-01	13767E+00	24064E+01	91945E-01
88000E+00	27817E+00	23319E+00	56660E-02	37413E-01	44088E-01	28434E+00	24633E+01	88426E-01
89000E+00	26999E+00	22655E+00	26336E-01	36438E-01	43863E-01	42749E+00	25188E+01	84902E-01
90000E+00	26182E+00	21991E+00	48020E-01	33897E-01	42496E-01	56743E+00	25730E+01	81634E-01
91000E+00	25365E+00	21328E+00	70531E-01	30086E-01	40069E-01	70447E+00	26260E+01	78346E-01
92000E+00	24547E+00	20663E+00	93699E-01	25095E-01	36558E-01	83887E+00	26781E+01	75124E-01
93000E+00	23727E+00	19997E+00	11738E+00	19007E-01	32331E-01	97088E+00	27293E+01	71961E-01
94000E+00	22903E+00	19329E+00	14143E+00	11897E-01	27151E-01	11007E+01	27797E+01	68853E-01
95000E+01	22075E+00	18657E+00	16574E+00	38326E-02	21175E-01	12286E+01	28294E+01	65795E-01
THETA= .19199E+01								
UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
83000E+00	31979E+00	26703E+00	74035E-01	18813E-01	24614E-01	49158E+00	21614E+01	10701E+00
84000E+00	31132E+00	26014E+00	62202E-01	26319E-01	31637E-01	32705E+00	22257E+01	10308E+00
85000E+00	30294E+00	25332E+00	47995E-01	31802E-01	36970E-01	16762E+00	22878E+01	99262E-01
86000E+00	29463E+00	24657E+00	31753E-01	35419E-01	40746E-01	12853E-01	23480E+01	95554E-01
87000E+00	28638E+00	23986E+00	13777E-01	37313E-01	43082E-01	13767E+00	24064E+01	91945E-01
88000E+00	27817E+00	23319E+00	56660E-02	37413E-01	44088E-01	28434E+00	24633E+01	88426E-01
89000E+00	26999E+00	22655E+00	26336E-01	36438E-01	43863E-01	42749E+00	25188E+01	84902E-01
90000E+00	26182E+00	21991E+00	48020E-01	33897E-01	42496E-01	56743E+00	25730E+01	81634E-01
91000E+00	25365E+00	21328E+00	70531E-01	30086E-01	40069E-01	70447E+00	26260E+01	78346E-01
92000E+00	24547E+00	20663E+00	93699E-01	25095E-01	36558E-01	83887E+00	26781E+01	75124E-01
93000E+00	23727E+00	19997E+00	11738E+00	19007E-01	32331E-01	97088E+00	27293E+01	71961E-01
94000E+00	22903E+00	19329E+00	14143E+00	11897E-01	27151E-01	11007E+01	27797E+01	68853E-01
95000E+01	22075E+00	18657E+00	16574E+00	38326E-02	21175E-01	12286E+01	28294E+01	65795E-01

.88000E+00	.11032E+01	-.60100E+00	.25480E+00	-.28442E-01	-.35356E-01	.23487E-01	-.42316E+00	.18608E+01	-.21077E+00
.89000E+00	.11014E+01	-.58509E+00	.24822E+00	-.19824E-01	-.49463E-01	.30188E-01	-.29035E+00	.19072E+01	-.20302E+00
.90000E+00	.10993E+01	-.56934E+00	.24172E+00	-.93510E-02	-.59768E-01	.35277E-01	-.16169E+00	.19520E+01	-.19551E+00
.91000E+00	.10972E+01	-.55373E+00	.23527E+00	.27099E-02	-.66565E-01	.38879E-01	-.36804E-01	.19953E+01	-.18820E+00
.92000E+00	.10948E+01	-.53823E+00	.22888E+00	.16121E-01	-.70125E-01	.41109E-01	.84630E-01	.20373E+01	-.18110E+00
.93000E+00	.10924E+01	-.52280E+00	.22751E+00	.30670E-01	-.70689E-01	.42069E-01	.20292E+00	.20782E+01	-.17417E+00
.94000E+00	.10898E+01	-.50742E+00	.21617E+00	.46169E-01	-.68482E-01	.41853E-01	.31836E+00	.21180E+01	-.16740E+00
.95000E+00	.10871E+01	-.49206E+00	.20984E+00	.62450E-01	-.63705E-01	.40549E-01	.43119E+00	.21569E+01	-.16079E+00
.96000E+00	.10843E+01	-.47671E+00	.20351E+00	.79363E-01	-.56542E-01	.38233E-01	.54165E+00	.21949E+01	-.15431E+00
.97000E+00	.10814E+01	-.46134E+00	.19717E+00	.96777E-01	-.47163E-01	.34979E-01	.64997E+00	.22322E+01	-.14797E+00
.98000E+00	.10784E+01	-.44592E+00	.19031E+00	.11457E+00	-.35722E-01	.30850E-01	.75633E+00	.22689E+01	-.14174E+00
.99000E+00	.10753E+01	-.43044E+00	.18444E+00	.13265E+00	-.22359E-01	.25907E-01	.86093E+00	.23050E+01	-.13561E+00
.10000E+01	.10721E+01	-.41488E+00	.17802E+00	.15090E+00	-.72029E-02	.20205E-01	.96393E+00	.23406E+01	-.12959E+00

FEE= -13963E+01

THETA= 0.

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
-88000E+00	-17004E+01	0.	0.	-43525E+00	0.	0.	-43922E+00	-13626E+01	-32790E+00
-89000E+00	-16975E+01	0.	0.	-41117E+00	0.	0.	-24327E+00	-14923E+01	-31585E+00
-90000E+00	-16944E+01	0.	0.	-38367E+00	0.	0.	-53128E-01	-16182E+01	-30416E+00
-91000E+00	-16910E+01	0.	0.	-35321E+00	0.	0.	-13117E+00	-17406E+01	-29279E+00
-92000E+00	-16873E+01	0.	0.	-32018E+00	0.	0.	-31181E+00	-18599E+01	-28173E+00
-93000E+00	-16835E+01	0.	0.	-28497E+00	0.	0.	-48752E+00	-19764E+01	-27095E+00
-94000E+00	-16795E+01	0.	0.	-24788E+00	0.	0.	-65927E+00	-20903E+01	-26043E+00
-95000E+00	-16753E+01	0.	0.	-20920E+00	0.	0.	-82744E+00	-22019E+01	-25014E+00
-96000E+00	-16709E+01	0.	0.	-16919E+00	0.	0.	-99237E+00	-23115E+01	-24007E+00
-97000E+00	-16663E+01	0.	0.	-12808E+00	0.	0.	-11544E+01	-24193E+01	-23019E+00
-98000E+00	-16616E+01	0.	0.	-8606E-01	0.	0.	-13137E+01	-25253E+01	-22050E+00
-99000E+00	-16568E+01	0.	0.	-43337E-01	0.	0.	-14707E+01	-26300E+01	-21098E+00
-10000E+00	-16519E+01	0.	0.	-43952E-04	0.	0.	-16255E+01	-27333E+01	-20161E+00

THETA= .17453E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
-88000E+00	-16010E+01	-33231E+00	-25053E-01	-41972E+00	-19967E-01	-23093E-02	-41478E+00	-12538E+01	-32292E+00
-89000E+00	-15982E+01	-32352E+00	-24407E-01	-39680E+00	-27803E-01	-29682E-02	-23029E+00	-13771E+01	-31105E+00
-90000E+00	-15953E+01	-31482E+00	-23767E-01	-37065E+00	-33536E-01	-34686E-02	-51244E-01	-14967E+01	-29954E+00
-91000E+00	-15921E+01	-30620E+00	-23134E-01	-34170E+00	-37330E-01	-38228E-02	-12283E+00	-16131E+01	-28835E+00
-92000E+00	-15886E+01	-29764E+00	-22504E-01	-31033E+00	-39334E-01	-40420E-02	-29239E+00	-17264E+01	-27745E+00
-93000E+00	-15850E+01	-28911E+00	-21879E-01	-27688E+00	-39681E-01	-41364E-02	-45786E+00	-18371E+01	-26684E+00
-94000E+00	-15812E+01	-28062E+00	-21255E-01	-24166E+00	-38496E-01	-41153E-02	-61961E+00	-19454E+01	-25647E+00
-95000E+00	-15772E+01	-27214E+00	-20632E-01	-20494E+00	-35890E-01	-39870E-02	-77799E+00	-20515E+01	-24634E+00
-96000E+00	-15731E+01	-26366E+00	-20010E-01	-16696E+00	-31455E-01	-37593E-02	-93332E+00	-21556E+01	-23642E+00
-97000E+00	-15688E+01	-25517E+00	-19387E-01	-12793E+00	-26815E-01	-34393E-02	-10859E+01	-22580E+01	-22670E+00
-98000E+00	-15644E+01	-24665E+00	-18762E-01	-88048E-01	-20524E-01	-30334E-02	-12360E+01	-23589E+01	-21715E+00
-99000E+00	-15599E+01	-23810E+00	-18135E-01	-47481E-01	-13171E-01	-25474E-02	-13838E+01	-24583E+01	-20777E+00
-10000E+00	-15552E+01	-22950E+00	-17504E-01	-65748E-02	-48259E-02	-19867E-02	-15296E+01	-25565E+01	-19854E+00

THETA= .34907E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
-88000E+00	-13146E+00	-62454E+00	-49345E-01	-37499E+00	-37526E-01	-45485E-02	-3441E+00	-94075E+00	-30812E+00
-89000E+00	-13123E+01	-60802E+00	-48072E-01	-35542E+00	-52252E-01	-58463E-02	-19289E+00	-10454E+01	-29680E+00
-90000E+00	-13099E+01	-59168E+00	-46812E-01	-33316E+00	-63027E-01	-68319E-02	-45834E-01	-11469E+01	-28581E+00
-91000E+00	-13072E+01	-57547E+00	-45564E-01	-30856E+00	-70158E-01	-75295E-02	-97169E-01	-12457E+01	-27514E+00
-92000E+00	-13044E+01	-55937E+00	-44325E-01	-28195E+00	-73923E-01	-79613E-02	-23479E+00	-13420E+01	-26474E+00
-93000E+00	-13014E+01	-54336E+00	-43002E-01	-25360E+00	-74576E-01	-81472E-02	-37246E+00	-14360E+01	-25461E+00
-94000E+00	-12983E+01	-52739E+00	-41864E-01	-22377E+00	-72349E-01	-81055E-02	-50540E+00	-15280E+01	-24472E+00
-95000E+00	-12950E+01	-51145E+00	-40638E-01	-19268E+00	-67451E-01	-78529E-02	-63559E+00	-16182E+01	-23505E+00
-96000E+00	-12916E+01	-49551E+00	-39412E-01	-16053E+00	-60075E-01	-74044E-02	-76332E+00	-17067E+01	-22559E+00
-97000E+00	-12881E+01	-47955E+00	-38184E-01	-12750E+00	-50395E-01	-67741E-02	-88874E+00	-17938E+01	-21631E+00
-98000E+00	-12845E+01	-46355E+00	-36954E-01	-93746E+00	-38572E-01	-59745E-02	-10122E+01	-18795E+01	-20720E+00
-99000E+00	-12807E+01	-44748E+00	-35719E-01	-59412E-01	-24753E-01	-50173E-02	-11338E+01	-19640E+01	-19825E+00
-10000E+00	-12768E+01	-43133E+00	-34477E-01	-24623E-01	-90698E-02	-39130E-02	-12537E+01	-20476E+01	-18945E+00

THETA= .52360E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
-88000E+00	-87584E+00	-84144E+00	-72138E-01	-30647E+00	-50559E-01	-66495E-02	-25860E+00	-46108E+00	-28397E+00
-89000E+00	-87432E+00	-81919E+00	-70276E-01	-29202E+00	-70399E-01	-85467E-02	-13560E+00	-53715E+00	-27353E+00
-90000E+00	-87267E+00	-79716E+00	-68435E-01	-27572E+00	-84916E-01	-99875E-02	-37540E-01	-61103E+00	-26341E+00
-91000E+00	-87088E+00	-77533E+00	-66611E-01	-25779E+00	-94523E-01	-11007E-01	-57859E-01	-68294E+00	-25357E+00
-92000E+00	-86898E+00	-75364E+00	-64799E-01	-23847E+00	-99596E-01	-11634E-01	-15084E+00	-75306E+00	-24399E+00
-93000E+00	-86697E+00	-73206E+00	-62997E-01	-21793E+00	-10048E+00	-11910E-01	-24163E+00	-82157E+00	-23465E+00
-94000E+00	-86485E+00	-71055E+00	-61201E-01	-19635E+00	-97476E-01	-11849E-01	-33042E+00	-88862E+00	-22554E+00
-95000E+00	-86264E+00	-68908E+00	-59408E-01	-17389E+00	-90077E-01	-11480E-01	-41742E+00	-95437E+00	-21663E+00

THETA = .6913E+00	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.96000E+00	-.86035E+00	.66760E+00	.57616E-01	.15067E+00	.80939E-01	.10825E-01	.50279E+00	-.10189E+01		.20790E+00
.97000E+00	-.85798E+00	.64610E+00	.55822E-01	.12683E+00	.67897E-01	.99031E-02	.58669E+00	-.10825E+01		.19935E+00
.98000E+00	-.85532E+00	.62454E+00	.54023E-01	.10248E+00	.51969E-01	.87342E-02	.66926E+00	-.11450E+01		.19096E+00
.99000E+00	-.85300E+00	.60289E+00	.52217E-01	.77693E-01	.33349E-01	.73348E-02	.75065E+00	-.12068E+01		.18271E+00
.10000E+01	-.85041E+00	.58112E+00	.50402E-01	.52573E-01	.12220E-01	.57204E-02	.83097E+00	-.12578E+01		.17460E+00
.88000E+00	-.33763E+00	.75685E+00	.92738E-01	.22241E+00	.57493E-01	.85484E-02	.10434E+00	.12732E+00		.25118E+00
.89000E+00	-.33701E+00	.93154E+00	.90345E-01	.21426E+00	.80055E-01	.10987E-01	.65335E-01	.86285E-01		.24195E+00
.90000E+00	-.33634E+00	.90650E+00	.87979E-01	.20526E+00	.96563E-01	.12840E-01	.27365E-01	.46355E-01		.23300E+00
.91000E+00	-.33561E+00	.88167E+00	.85633E-01	.19552E+00	.10749E+00	.14151E-01	.96381E-02	.74257E-02		.22429E+00
.92000E+00	-.33483E+00	.85701E+00	.83304E-01	.18513E+00	.11326E+00	.14962E-01	.45776E-01	.30599E-01		.21582E+00
.93000E+00	-.33401E+00	.83247E+00	.80987E-01	.17417E+00	.11426E+00	.15312E-01	.81132E-01	.67804E-01		.20756E+00
.94000E+00	-.33315E+00	.80801E+00	.78678E-01	.16272E+00	.11085E+00	.15233E-01	.11578E+00	.66427E+00		.19950E+00
.95000E+00	-.33229E+00	.78359E+00	.76374E-01	.15084E+00	.10334E+00	.14759E-01	.14980E+00	.14007E+00		.19162E+00
.96000E+00	-.33132E+00	.75917E+00	.74070E-01	.13859E+00	.92040E-01	.13916E-01	.18324E+00	.17527E+00		.18390E+00
.97000E+00	-.33036E+00	.73472E+00	.71763E-01	.12602E+00	.77210E-01	.12731E-01	.21617E+00	.20993E+00		.17634E+00
.98000E+00	-.32937E+00	.71020E+00	.69451E-01	.11318E+00	.59096E-01	.11228E-01	.24864E+00	.24411E+00		.16891E+00
.99000E+00	-.32835E+00	.68558E+00	.67129E-01	.10012E+00	.37923E-01	.94295E-02	.28070E+00	.27785E+00		.16162E+00
.10000E+01	-.32731E+00	.66083E+00	.64795E-01	.86859E-01	.13896E-01	.73540E-02	.31239E+00	.31122E+00		.15444E+00

THETA = .87266E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	.23511E+00	.95685E+00	.11052E+00	.13296E+00	.57493E-01	.10188E-01	-.36401E-01	.75348E+00	.21077E+00
.89000E+00	.23478E+00	.93154E+00	.10767E+00	.13150E+00	.80055E-01	.13094E-01	-.94621E-02	.74973E+00	.20302E+00
.90000E+00	.23441E+00	.90650E+00	.10485E+00	.13028E+00	.96563E-01	.15302E-01	.16538E-01	.74593E+00	.19551E+00
.91000E+00	.23402E+00	.88167E+00	.10205E+00	.12925E+00	.10749E+00	.16864E-01	.41678E-01	.74209E+00	.18820E+00
.92000E+00	.23360E+00	.85701E+00	.99278E-01	.12637E+00	.11326E+00	.17831E-01	.66030E-01	.73822E+00	.18110E+00
.93000E+00	.23315E+00	.83247E+00	.96517E-01	.12760E+00	.11426E+00	.18248E-01	.89662E-01	.73433E+00	.17417E+00
.94000E+00	.23268E+00	.80801E+00	.93765E-01	.12693E+00	.11085E+00	.18154E-01	.18154E+00	.73042E+00	.16740E+00
.95000E+00	.23218E+00	.78359E+00	.91019E-01	.12631E+00	.10334E+00	.17589E-01	.13500E+00	.72649E+00	.16079E+00
.96000E+00	.23166E+00	.75917E+00	.88273E-01	.12573E+00	.92040E-01	.16584E-01	.15682E+00	.72255E+00	.15431E+00
.97000E+00	.23112E+00	.73472E+00	.85524E-01	.12516E+00	.77210E-01	.15172E-01	.17813E+00	.71860E+00	.14797E+00
.98000E+00	.23056E+00	.71020E+00	.82768E-01	.12458E+00	.59096E-01	.13382E-01	.19898E+00	.71464E+00	.14174E+00
.99000E+00	.22997E+00	.68558E+00	.80001E-01	.12398E+00	.37923E-01	.11238E-01	.21941E+00	.71068E+00	.13561E+00
.10000E+01	.22937E+00	.66083E+00	.77220E-01	.12335E+00	.13896E-01	.87642E-02	.23946E+00	.70672E+00	.12959E+00

THETA = .10472E+01

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	.77331E+00	.84144E+00	.12495E+00	.48897E-01	.50559E-01	.11517E-01	-.16866E+00	.13419E+01	.16395E+00
.89000E+00	.77209E+00	.81919E+00	.12172E+00	.53732E-01	.70399E-01	.14803E-01	-.79739E-01	.13732E+01	.15792E+00
.90000E+00	.77075E+00	.79716E+00	.11853E+00	.59818E-01	.84916E-01	.17299E-01	.63632E-02	.14033E+01	.15208E+00
.91000E+00	.76930E+00	.77533E+00	.11537E+00	.66971E-01	.94523E-01	.19065E-01	.89898E-01	.14325E+01	.14640E+00
.92000E+00	.76775E+00	.75364E+00	.11224E+00	.75025E-01	.99596E-01	.20159E-01	.17109E+00	.14607E+01	.14087E+00
.93000E+00	.76611E+00	.73206E+00	.10911E+00	.83847E-01	.10048E+00	.20629E-01	.25016E+00	.14881E+01	.13548E+00
.94000E+00	.76439E+00	.71055E+00	.10600E+00	.93296E-01	.97476E-01	.20524E-01	.32727E+00	.15148E+01	.13021E+00
.95000E+00	.76258E+00	.68908E+00	.10290E+00	.10326E+00	.90877E-01	.19884E-01	.40263E+00	.15408E+01	.12507E+00
.96000E+00	.76070E+00	.66760E+00	.99794E-01	.11364E+00	.80939E-01	.18749E-01	.47637E+00	.15662E+01	.12003E+00
.97000E+00	.75874E+00	.64610E+00	.96686E-01	.12434E+00	.67897E-01	.17153E-01	.54865E+00	.15911E+01	.11510E+00
.98000E+00	.75672E+00	.62454E+00	.93570E-01	.13529E+00	.51969E-01	.15128E-01	.61961E+00	.16156E+01	.11025E+00
.99000E+00	.75462E+00	.60289E+00	.90443E-01	.14641E+00	.33349E-01	.12704E-01	.68936E+00	.16396E+01	.10549E+00
.10000E+01	.75247E+00	.58112E+00	.87299E-01	.15763E+00	.12220E-01	.99080E-02	.75803E+00	.16633E+01	.10080E+00

THETA = .12217E+01

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	.12121E+01	.62454E+00	.13557E+00	.19628E-01	.37526E-01	.12497E-01	-.27647E+00	.18215E+01	.11215E+00
.89000E+00	.12101E+01	.60802E+00	.13208E+00	-.96644E-02	.52252E-01	.16063E-01	-.13703E+00	.18814E+01	.10803E+00
.90000E+00	.12080E+01	.59168E+00	.12862E+00	.23780E-02	.63027E-01	.18770E-01	-.19312E-02	.19392E+01	.10403E+00
.91000E+00	.12057E+01	.57547E+00	.12519E+00	.16203E-01	.70158E-01	.20687E-01	.12921E+00	.19952E+01	.10014E+00



92000E+00	12032E+01	55937E+00	12178E+00	31547E-01	73923E-01	21873E-01	25674E+00	20496E+01	96359E-01
93000E+00	12006E+01	54336E+00	11840E+00	48176E-01	74576E-01	22384E-01	38099E+00	21026E+01	92672E-01
94000E+00	11978E+01	52739E+00	11502E+00	65879E-01	72349E-01	22270E-01	50225E+00	21542E+01	89072E-01
95000E+00	11950E+01	51145E+00	11165E+00	84472E-01	67451E-01	21576E-01	62079E+00	22046E+01	85553E-01
96000E+00	11920E+01	49551E+00	10828E+00	10379E-01	60075E-01	20344E-01	73687E+00	22540E+01	82108E-01
97000E+00	11892E+01	47955E+00	10491E+00	12368E+00	50395E-01	18612E-01	85070E+00	23024E+01	78731E-01
98000E+00	11856E+01	46355E+00	10153E+00	14402E+00	38572E-01	16415E-01	96250E+00	23500E+01	75416E-01
99000E+00	11823E+01	44748E+00	98136E-01	16469E+00	24753E-01	13785E-01	10725E+01	23969E+01	72159E-01
10000E+01	11789E+01	43133E+00	94725E-01	18558E+00	90698E-02	10751E-01	11808E+01	24431E+01	68954E-01
THETA= .13963E+01									
88000E+00	14984E+01	33231E+00	14208E+00	-64355E-01	19967E-01	13097E-01	-34684E+00	21346E+01	56939E-01
89000E+00	14960E+01	32352E+00	13842E+00	-51044E-01	27803E-01	16834E-01	-17442E+00	22131E+01	54847E-01
90000E+00	14933E+01	31482E+00	13479E+00	-35113E-01	33536E-01	19672E-01	-73449E-02	22990E+01	52816E-01
91000E+00	14905E+01	30620E+00	13120E+00	-16933E-01	37330E-01	21680E-01	15487E+00	23626E+01	50843E-01
92000E+00	14874E+01	29764E+00	12763E+00	31668E-02	39334E-01	22924E-01	31264E+00	24340E+01	48923E-01
93000E+00	14842E+01	28911E+00	12408E+00	24893E-01	39681E-01	23459E-01	46639E+00	25036E+01	47051E-01
94000E+00	14807E+01	28062E+00	12054E+00	47984E-01	38496E-01	23339E-01	61646E+00	25715E+01	45223E-01
95000E+00	14772E+01	27214E+00	11701E+00	72208E-01	35890E-01	22611E-01	76319E+00	26379E+01	43436E-01
96000E+00	14735E+01	26366E+00	11348E+00	97358E-01	31965E-01	21320E-01	90690E+00	27029E+01	41687E-01
97000E+00	14696E+01	25517E+00	10995E+00	12325E+00	26815E-01	19505E-01	10479E+01	27667E+01	39973E-01
98000E+00	14656E+01	24665E+00	10640E+00	14972E+00	20524E-01	17203E-01	11863E+01	28294E+01	38290E-01
99000E+00	14615E+01	23810E+00	10285E+00	17662E+00	13171E-01	14447E-01	13225E+01	28911E+01	36636E-01
10000E+01	14572E+01	22950E+00	99272E-01	20383E+00	48259E-02	11267E-01	14567E+01	29520E+01	35009E-01
THETA= .15708E+01									
88000E+00	15979E+01	51897E-13	14428E+00	-79888E-01	31183E-14	13299E-01	-37128E+00	22434E+01	87570E-14
89000E+00	15953E+01	50524E-13	14055E+00	-65414E-01	43419E-14	17093E-01	-18741E+00	23483E+01	84352E-14
90000E+00	15925E+01	49166E-13	13687E+00	-48133E-01	52373E-14	19975E-01	-92251E-02	24105E+01	81230E-14
91000E+00	15894E+01	47819E-13	13322E+00	-28441E-01	58298E-14	22015E-01	16378E+00	24901E+01	78195E-14
92000E+00	15861E+01	46482E-13	12960E+00	-66897E-02	61427E-14	23277E-01	33206E+00	25676E+01	75242E-14
93000E+00	15826E+01	45151E-13	12599E+00	16807E-01	61970E-14	23821E-01	49605E+00	26429E+01	72363E-14
94000E+00	15790E+01	43824E-13	12240E+00	41769E-01	60119E-14	23699E-01	5612E+00	27165E+01	69552E-14
95000E+00	15752E+01	42500E-13	11882E+00	6749E-01	56049E-14	22960E-01	81265E+00	27884E+01	66804E-14
96000E+00	15712E+01	41175E-13	11523E+00	95124E-01	49920E-14	21649E-01	96595E+00	28588E+01	64114E-14
97000E+00	15671E+01	39849E-13	11164E+00	12310E+00	41877E-14	19806E-01	11163E+01	29279E+01	61477E-14
98000E+00	15628E+01	38519E-13	10805E+00	15170E+00	32052E-14	17468E-01	12640E+01	29959E+01	58888E-14
99000E+00	15584E+01	37184E-13	10443E+00	18076E+00	20569E-14	14670E-01	14094E+01	30628E+01	56345E-14
10000E+01	15539E+01	35841E-13	10080E+00	21016E+00	75366E-15	11441E-01	15525E+01	31288E+01	53843E-14
THETA= .17453E+01									
88000E+00	14984E+01	-33231E+00	14208E+00	-64355E-01	19967E-01	13097E-01	-34684E+00	21346E+01	56939E-01
89000E+00	14960E+01	-32352E+00	13842E+00	-51044E-01	27803E-01	16834E-01	-17442E+00	22131E+01	54847E-01
90000E+00	14933E+01	-31482E+00	13479E+00	-35113E-01	33536E-01	19672E-01	-73449E-02	22990E+01	52816E-01
91000E+00	14905E+01	-30620E+00	13120E+00	-16933E-01	37330E-01	21680E-01	15487E+00	23626E+01	50843E-01
92000E+00	14874E+01	-29764E+00	12763E+00	31668E-02	39334E-01	22924E-01	31264E+00	24340E+01	48923E-01
93000E+00	14842E+01	-28911E+00	12408E+00	24893E-01	39681E-01	23459E-01	46639E+00	25036E+01	47051E-01
94000E+00	14807E+01	-28062E+00	12054E+00	47984E-01	38496E-01	23339E-01	61646E+00	25715E+01	45223E-01
95000E+00	14772E+01	-27214E+00	11701E+00	72208E-01	35890E-01	22611E-01	76319E+00	26379E+01	43436E-01
96000E+00	14735E+01	-26366E+00	11348E+00	97358E-01	31965E-01	21320E-01	90690E+00	27029E+01	41687E-01
97000E+00	14696E+01	-25517E+00	10995E+00	12325E+00	26815E-01	19505E-01	10479E+01	27667E+01	39973E-01
98000E+00	14656E+01	-24665E+00	10640E+00	14972E+00	20524E-01	17203E-01	11863E+01	28294E+01	38290E-01
99000E+00	14615E+01	-23810E+00	10285E+00	17662E+00	13171E-01	14447E-01	13225E+01	28911E+01	36636E-01
10000E+01	14572E+01	-22950E+00	99272E-01	20383E+00	48259E-02	11267E-01	14567E+01	29520E+01	35009E-01
THETA= .19199E+01									
88000E+00	14984E+01	-33231E+00	14208E+00	-64355E-01	19967E-01	13097E-01	-34684E+00	21346E+01	56939E-01
89000E+00	14960E+01	-32352E+00	13842E+00	-51044E-01	27803E-01	16834E-01	-17442E+00	22131E+01	54847E-01
90000E+00	14933E+01	-31482E+00	13479E+00	-35113E-01	33536E-01	19672E-01	-73449E-02	22990E+01	52816E-01
91000E+00	14905E+01	-30620E+00	13120E+00	-16933E-01	37330E-01	21680E-01	15487E+00	23626E+01	50843E-01
92000E+00	14874E+01	-29764E+00	12763E+00	31668E-02	39334E-01	22924E-01	31264E+00	24340E+01	48923E-01
93000E+00	14842E+01	-28911E+00	12408E+00	24893E-01	39681E-01	23459E-01	46639E+00	25036E+01	47051E-01
94000E+00	14807E+01	-28062E+00	12054E+00	47984E-01	38496E-01	23339E-01	61646E+00	25715E+01	45223E-01
95000E+00	14772E+01	-27214E+00	11701E+00	72208E-01	35890E-01	22611E-01	76319E+00	26379E+01	43436E-01
96000E+00	14735E+01	-26366E+00	11348E+00	97358E-01	31965E-01	21320E-01	90690E+00	27029E+01	41687E-01
97000E+00	14696E+01	-25517E+00	10995E+00	12325E+00	26815E-01	19505E-01	10479E+01	27667E+01	39973E-01
98000E+00	14656E+01	-24665E+00	10640E+00	14972E+00	20524E-01	17203E-01	11863E+01	28294E+01	38290E-01
99000E+00	14615E+01	-23810E+00	10285E+00	17662E+00	13171E-01	14447E-01	13225E+01	28911E+01	36636E-01
10000E+01	14572E+01	-22950E+00	99272E-01	20383E+00	48259E-02	11267E-01	14567E+01	29520E+01	35009E-01



.88000E+00	.12121E+01	-.62+54E+00	.13557E+00	-.19628E-01	-.37526E-01	.12497E-01	-.27647E+00	.18215E+01	-.11215E+00
.89000E+00	.12101E+01	-.60802E+00	.13208E+00	-.96644E-02	-.52252E-01	.16063E-01	-.13703E+00	.18814E+01	-.10803E+00
.90000E+00	.12080E+01	-.59168E+00	.12862E+00	.23780E-02	-.63027E-01	.18770E-01	-.19312E-02	.19392E+01	-.10403E+00
.91000E+00	.12057E+01	-.57547E+00	.12519E+00	.16203E-01	-.70159E-01	.20687E-01	.12921E+00	.19952F+01	-.10014E+00
.92000E+00	.12032E+01	-.55937E+00	.12178E+00	.31547E-01	-.73923E-01	.21873E-01	.25674E+00	.20496E+01	-.96359E-01
.93000E+00	.12006E+01	-.54336E+00	.11840E+00	.49176E-01	-.74576E-01	.22+34E-01	.38099E+00	.21026E+01	-.92672E-01
.94000E+00	.11978E+01	-.52739E+00	.11502E+00	.65879E-01	-.72349E-01	.22270E-01	.50225E+00	.21542E+01	-.89072E-01
.95000E+00	.11950E+01	-.51145E+00	.11165E+00	.84472E-01	-.67451E-01	.1576E-01	.62079E+00	.22046E+01	-.85553E-01
.96000E+00	.11920E+01	-.49551E+00	.10828E+00	.10379E+00	-.60075E-01	.203+4E-01	.73687E+00	.22540E+01	-.82108E-01
.97000E+00	.11899E+01	-.47955E+00	.10491E+00	.12368E+00	-.50395E-01	.18612E-01	.85070E+00	.23024F+01	-.78731E-01
.98000E+00	.11856E+01	-.46355E+00	.10153E+00	.14402E+00	-.38572E-01	.16415E-01	.96250E+00	.23500E+01	-.75416E-01
.99000E+00	.11823E+01	-.44748E+00	.98136E-01	.16469E+00	-.24753E-01	.13785E-01	.10725E+01	.23969E+01	-.72159E-01
.10000E+01	.11789E+01	-.43133E+00	.94725E-01	.18558E+00	-.90698E-02	.10751E-01	.11808E+01	.24431E+01	-.68954E-01

FEE= .15708E+01  
THETA= 0.

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.17004E+01	0.	.43525E+00	0.	0.	.49704E+00	-.14204E+01	.51208E-13
.89000E+00	-.16975E+01	0.	.41117E+00	0.	0.	.29897E+00	-.15480E+01	.49326E-13
.90000E+00	-.16944E+01	0.	.38367E+00	0.	0.	.10676E+00	-.16718E+01	.47500E-13
.91000E+00	-.16910E+01	0.	.35321E+00	0.	0.	-.80110E-01	-.17923E+01	.45726E-13
.92000E+00	-.16873E+01	0.	.32018E+00	0.	0.	-.26213E+00	-.19096E+01	.43998E-13
.93000E+00	-.16835E+01	0.	.28497E+00	0.	0.	-.43974E+00	-.20242E+01	.42315E-13
.94000E+00	-.16795E+01	0.	.24788E+00	0.	0.	-.61335E+00	-.21362E+01	.40671E-13
.95000E+00	-.16753E+01	0.	.20920E+00	0.	0.	-.78334E+00	-.22461E+01	.39064E-13
.96000E+00	-.16709E+01	0.	.16919E+00	0.	0.	-.95004E+00	-.23539E+01	.37491E-13
.97000E+00	-.16663E+01	0.	.12804E+00	0.	0.	-.111138E+01	-.24598E+01	.35949E-13
.98000E+00	-.16616E+01	0.	.86069E-01	0.	0.	-.12748E+01	-.25642E+01	.34436E-13
.99000E+00	-.16568E+01	0.	.43337E-01	0.	0.	-.14334E+01	-.26672E+01	.32948E-13
.10000E+01	-.16519E+01	0.	.43952E-04	0.	0.	-.15899E+01	-.27698E+01	.31485E-13

THETA= .17453E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.15997E+01	.39125E-14	.41982E+00	.20368E-01	.36065E-15	.47237E+00	-.13101E+01	.50430E-13
.89000E+00	-.15969E+01	.38116E-14	.39692E+00	.28318E-01	.46355E-15	.28590E+00	-.14312E+01	.48577E-13
.90000E+00	-.15940E+01	.37117E-14	.37079E+00	.34138E-01	.54169E-15	.10494E+00	-.15487E+01	.46779E-13
.91000E+00	-.15908E+01	.36128E-14	.34186E+00	.37994E-01	.59701E-15	-.70594E-01	-.16629E+01	.45031E-13
.92000E+00	-.15874E+01	.35145E-14	.31051E+00	.40035E-01	.63125E-15	-.24237E+00	-.17743E+01	.43330E-13
.93000E+00	-.15837E+01	.34168E-14	.27709E+00	.40400E-01	.64559E-15	-.40960E+00	-.18930E+01	.41672E-13
.94000E+00	-.15799E+01	.33194E-14	.24190E+00	.39211E-01	.64268E-15	-.57307E+00	-.19893E+01	.40053E-13
.95000E+00	-.15760E+01	.32221E-14	.20520E+00	.36582E-01	.62265E-15	-.73314E+00	-.20935E+01	.38471E-13
.96000E+00	-.15718E+01	.31249E-14	.16725E+00	.32618E-01	.58709E-15	-.89012E+00	-.21958E+01	.36922E-13
.97000E+00	-.15676E+01	.30276E-14	.12825E+00	.27412E-01	.53712E-15	-.10443E+01	-.22964E+01	.35403E-13
.98000E+00	-.15631E+01	.29301E-14	.88397E-01	.21015E-01	.47372E-15	-.11960E+01	-.23954E+01	.33913E-13
.99000E+00	-.15586E+01	.28321E-14	.47861E-01	.13613E-01	.39782E-15	-.13454E+01	-.24931E+01	.32448E-13
.10000E+01	-.15539E+01	.27337E-14	.67910E-02	.51709E-02	.31026E-15	-.14927E+01	-.25896E+01	.31007E-13

THETA= .34907E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.13096E+01	.77062E-14	.37540E+00	.38280E-01	.71034E-15	.40132E+00	-.99271E+00	.48120E-13
.89000E+00	-.13073E+01	.75074E-14	.35589E+00	.53221E-01	.91301E-15	.24826E+00	-.10949E+01	.46351E-13
.90000E+00	-.13049E+01	.73107E-14	.33370E+00	.64159E-01	.10663E-14	.99710E-01	-.11940E+01	.44635E-13
.91000E+00	-.13023E+01	.71158E-14	.30918E+00	.71405E-01	.11753E-14	-.44743E-01	-.12905E+01	.42968E-13
.92000E+00	-.12994E+01	.69222E-14	.28266E+00	.75242E-01	.12433E-14	-.18547E+00	-.13855E+01	.41345E-13
.93000E+00	-.12965E+01	.67297E-14	.25440E+00	.75926E-01	.12723E-14	-.32282E+00	-.14764E+01	.39763E-13
.94000E+00	-.12933E+01	.65379E-14	.22467E+00	.73692E-01	.12654E-14	-.45710E+00	-.15662E+01	.38218E-13
.95000E+00	-.12901E+01	.63464E-14	.19369E+00	.68752E-01	.12264E-14	-.58860E+00	-.16543E+01	.36708E-13
.96000E+00	-.12867E+01	.61549E-14	.16165E+00	.61302E-01	.11563E-14	-.71758E+00	-.17407E+01	.35230E-13
.97000E+00	-.12832E+01	.59632E-14	.12874E+00	.51518E-01	.10579E-14	-.84429E+00	-.18257E+01	.33781E-13
.98000E+00	-.12795E+01	.57711E-14	.95101E-01	.39562E-01	.93304E-15	-.96894E+00	-.19095E+01	.32359E-13
.99000E+00	-.12758E+01	.55782E-14	.60887E-01	.25584E-01	.78355E-15	-.10917E+01	-.19921E+01	.30961E-13
.10000E+01	-.12719E+01	.53843E-14	.26218E-01	.97131E-02	.61109E-15	-.12129E+01	-.20737E+01	.29586E-13

THETA= .52360E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.86513E+00	.11266E-13	.85244E+00	.51574E-01	.10384E-14	.29247E+00	-.50639E+00	.44347E-13
.89000E+00	-.86363E+00	.10975E-13	.82902E+00	.71704E-01	.13347E-14	.19060E+00	-.57961E+00	.42718E-13
.90000E+00	-.86199E+00	.10688E-13	.76787E+00	.86441E-01	.15597E-14	.91695E-01	-.65073E+00	.41136E-13
.91000E+00	-.86021E+00	.10403E-13	.70550E+00	.96204E-01	.17190E-14	-.45.48E-02	-.71995E+00	.39600E-13
.92000E+00	-.85832E+00	.10120E-13	.64354E+00	.10137E+00	.18176E-14	-.98303E-01	-.78746E+00	.38104E-13
.93000E+00	-.85633E+00	.98392E-14	.58392E+00	.10210E+00	.18600E-14	-.18987E+00	-.85342E+00	.36646E-13
.94000E+00	-.85423E+00	.95577E-14	.52929E+00	.99285E-01	.18505E-14	-.27942E+00	-.91798E+00	.35222E-13
.95000E+00	-.85204E+00	.92778E-14	.47778E+00	.92630E-01	.17928E-14	-.36716E+00	-.98129E+00	.33831E-13

.96000E+00 -.84977E+00 .67640E+00 .89979E-14 .15308E+00 .82592E-01 .16905E-14 -.45325E+00 -.10435E+01 .32468E-13  
 .97000E+00 -.84741E+00 .65462E+00 .87177E-14 .12948E+00 .69410E-01 .15466E-14 -.53785E+00 -.11047E+01 .31133E-13  
 .98000E+00 -.84498E+00 .63279E+00 .84367E-14 .10537E+00 .53302E-01 .13640E-14 -.62112E+00 -.11649E+01 .29822E-13  
 .99000E+00 -.84248E+00 .61086E+00 .81547E-14 .80844E-01 .34469E-01 .11455E-14 -.70318E+00 -.12244E+01 .28534E-13  
 .10000E+01 -.83991E+00 .58882E+00 .78712E-14 .55983E-01 .13093E-01 .89335E-15 -.78416E+00 -.12832E+01 .27267E-13

THETA= .69813E+00

R  
 .88000E+00 -.31994E+00 .96938E+00 .14483E-13 .22384E+00 .58648E-01 .13350E-14 .15894E+00 .90174E-01 .39227E-13  
 .89000E+00 -.31934E+00 .94375E+00 .14109E-13 .21591E+00 .81539E-01 .17159E-14 .11987E+00 .52459E-01 .37786E-13  
 .90000E+00 -.31868E+00 .91838E+00 .13740E-13 .20717E+00 .98297E-01 .20052E-14 .81862E-01 .15749E-01 .36387E-13  
 .91000E+00 -.31797E+00 .89324E+00 .13373E-13 .19771E+00 .10940E+00 .22099E-14 .44810E-01 .20050E-01 .35028E-13  
 .92000E+00 -.31722E+00 .86826E+00 .13010E-13 .18764E+00 .11528E+00 .23367E-14 .86256E-02 .55026E-01 .33709E-13  
 .93000E+00 -.31643E+00 .84341E+00 .12648E-13 .17701E+00 .11633E+00 .23912E-14 .26774E-01 .89259E-01 .32415E-13  
 .94000E+00 -.31599E+00 .81864E+00 .12287E-13 .16592E+00 .11290E+00 .23790E-14 .61464E-01 .12282E+00 .31156E-13  
 .95000E+00 -.31473E+00 .79391E+00 .11927E-13 .15442E+00 .10533E+00 .23048E-14 .95516E-01 .15578E+00 .29925E-13  
 .96000E+00 -.31383E+00 .76918E+00 .11567E-13 .14256E+00 .93920E-01 .21732E-14 .12899E+00 .18819E+00 .28720E-13  
 .97000E+00 -.31290E+00 .74441E+00 .11207E-13 .13039E+00 .78930E-01 .19882E-14 .16195E+00 .22012E+00 .27539E-13  
 .98000E+00 -.31194E+00 .71958E+00 .10846E-13 .11797E+00 .60613E-01 .17535E-14 .19445E+00 .25161E+00 .26379E-13  
 .99000E+00 -.31096E+00 .69465E+00 .10484E-13 .10532E+00 .39197E-01 .14726E-14 .22653E+00 .28272E+00 .25240E-13  
 .10000E+01 -.30996E+00 .66958E+00 .10119E-13 .92494E-01 .14889E-01 .11485E-14 .25824E+00 .31347E+00 .24119E-13

THETA= .87266E+00

R  
 .88000E+00 .26023E+00 .96938E+00 .17260E-13 .13499E+00 .58648E-01 .15910E-14 .16848E-01 .72502E+00 .32916E-13  
 .89000E+00 .25988E+00 .94375E+00 .16815E-13 .13384E+00 .81539E-01 .20449E-14 .44605E-01 .72509E+00 .31706E-13  
 .90000E+00 .25949E+00 .91838E+00 .16374E-13 .13298E+00 .98297E-01 .23897E-14 .72500E+00 .72500E+00 .30532E-13  
 .91000E+00 .25906E+00 .89324E+00 .15938E-13 .13236E+00 .10940E+00 .26337E-14 .97311E-01 .72477E+00 .29392E-13  
 .92000E+00 .25861E+00 .86826E+00 .15504E-13 .13193E+00 .11528E+00 .27847E-14 .12242E+00 .72441E+00 .28282E-13  
 .93000E+00 .25813E+00 .84341E+00 .15073E-13 .13164E+00 .11633E+00 .28497E-14 .14679E+00 .72394E+00 .27199E-13  
 .94000E+00 .25761E+00 .81864E+00 .14643E-13 .13148E+00 .11290E+00 .28352E-14 .17048E+00 .72337E+00 .26143E-13  
 .95000E+00 .25707E+00 .79391E+00 .14214E-13 .13139E+00 .10533E+00 .27468E-14 .19356E+00 .72272E+00 .25110E-13  
 .96000E+00 .25651E+00 .76918E+00 .13786E-13 .13136E+00 .93920E-01 .25899E-14 .21607E+00 .72198E+00 .24099E-13  
 .97000E+00 .25592E+00 .74441E+00 .13356E-13 .13137E+00 .78930E-01 .23695E-14 .23808E+00 .72118E+00 .23108E-13  
 .98000E+00 .25531E+00 .71958E+00 .12926E-13 .13138E+00 .60613E-01 .20898E-14 .25961E+00 .72032E+00 .22135E-13  
 .99000E+00 .25467E+00 .69465E+00 .12494E-13 .13138E+00 .39197E-01 .17550E-14 .28071E+00 .71941E+00 .21179E-13  
 .10000E+01 .25401E+00 .66958E+00 .12059E-13 .13135E+00 .14889E-01 .13647E-14 .30143E+00 .71846E+00 .20238E-13

THETA= .10472E+01

R  
 .88000E+00 .80542E+00 .85246E+00 .19513E-13 .51497E-01 .51574E-01 .17986E-14 .11668E+00 .13216E+01 .25604E-13  
 .89000E+00 .80417E+00 .82992E+00 .19009E-13 .56729E-01 .71704E-01 .23118E-14 .26124E-01 .13572E+01 .24663E-13  
 .90000E+00 .80279E+00 .80761E+00 .18511E-13 .63277E-01 .86441E-01 .27016E-14 .61566E-01 .13915E+01 .23750E-13  
 .91000E+00 .80130E+00 .78550E+00 .18018E-13 .70951E-01 .96204E-01 .29774E-14 .14665E+00 .14247E+01 .22863E-13  
 .92000E+00 .79971E+00 .76354E+00 .17528E-13 .79579E-01 .10137E+00 .31423E-14 .22935E+00 .14568E+01 .21999E-13  
 .93000E+00 .79803E+00 .74168E+00 .17040E-13 .89011E-01 .10230E+00 .32217E-14 .30988E+00 .14881E+01 .21157E-13  
 .94000E+00 .79625E+00 .71990E+00 .16554E-13 .99110E-01 .99285E-01 .32052E-14 .38844E+00 .15185E+01 .20336E-13  
 .95000E+00 .79439E+00 .69815E+00 .16070E-13 .10976E+00 .92630E-01 .31053E-14 .46520E+00 .15482E+01 .19532E-13  
 .96000E+00 .79245E+00 .67640E+00 .15585E-13 .12085E+00 .82592E-01 .29280E-14 .54013E+00 .15773E+01 .18746E-13  
 .97000E+00 .79043E+00 .65462E+00 .15099E-13 .13228E+00 .8410E-01 .26787E-14 .61398E+00 .16057E+01 .17975E-13  
 .98000E+00 .78835E+00 .63279E+00 .14613E-13 .14398E+00 .53302E-01 .23625E-14 .68628E+00 .16336E+01 .17218E-13  
 .99000E+00 .78619E+00 .61086E+00 .14124E-13 .15586E+00 .34469E-01 .19840E-14 .75736E+00 .16611E+01 .16474E-13  
 .10000E+01 .78396E+00 .58882E+00 .13633E-13 .16786E+00 .13093E-01 .15473E-14 .82735E+00 .16882E+01 .15742E-13

THETA= .12217E+01

R  
 .88000E+00 .12499E+01 .63272E+00 .21173E-13 .16567E-01 .38280E-01 .19516E-14 .22553E+00 .18079E+01 .17514E-13  
 .89000E+00 .12479E+01 .61599E+00 .20626E-13 .16136E-02 .53221E-01 .25085E-14 .83783E-01 .18724E+01 .16870E-13  
 .90000E+00 .12457E+01 .59943E+00 .20036E-13 .64515E-02 .64159E-01 .29314E-14 .5351E-01 .19348E+01 .16246E-13  
 .91000E+00 .12433E+01 .58302E+00 .19550E-13 .20889E-01 .71405E-01 .32307E-14 .18686E+00 .19952E+01 .15639E-13

.92000E+00 .12403E+01 .56672E+00 .19019E-13 .36905E-01 .75242E-01 .34160E-14 .31652E+00 .20539E+01 .15048E-13  
 .93000E+00 .12382E+01 .55050E+00 .18490E-13 .54255E-01 .75926E-01 .34957E-14 .44283E+00 .21110E+01 .14473E-13  
 .94000E+00 .12354E+01 .53433E+00 .17963E-13 .72725E-01 .73692E-01 .34778E-14 .56612E+00 .21668E+01 .13910E-13  
 .95000E+00 .12324E+01 .51819E+00 .17436E-13 .92120E-01 .68752E-01 .33694E-14 .68664E+00 .22212E+01 .13351E-13  
 .96000E+00 .12294E+01 .50204E+00 .16910E-13 .11227E+00 .61302E-01 .31770E-14 .80467E+00 .22745E+01 .12823E-13  
 .97000E+00 .12262E+01 .48588E+00 .16384E-13 .13302E+00 .51513E-01 .29066E-14 .92042E+00 .23268E+01 .12295E-13  
 .98000E+00 .12229E+01 .46967E+00 .15856E-13 .15425E+00 .39562E-01 .25635E-14 .10341E+01 .23732E+01 .11778E-13  
 .99000E+00 .12195E+01 .45340E+00 .15326E-13 .17582E+00 .25584E-01 .21528E-14 .11459E+01 .24288E+01 .11263E-13  
 .10000E+00 .12160E+01 .43704E+00 .14793E-13 .19763E+00 .97181E-02 .16790E-14 .12561E+01 .24787E+01 .10769E-13

THETA= .13963E+01

.88000E+00 .15400E+01 .33666E+00 .22139E-13 .60993E-01 .20368E-01 .20453E-14 .-29658E+00 .21253E+01 .8921E-14  
 .89000E+00 .15375E+01 .32776E+00 .21617E-13 .47168E-01 .28318E-01 .26289E-14 .-12142E+00 .22047E+01 .85654E-14  
 .90000E+00 .15348E+01 .31895E+00 .21050E-13 .30639E-01 .34138E-01 .30721E-14 .48319E-01 .22344E+01 .82483E-14  
 .91000E+00 .15319E+01 .31022E+00 .20489E-13 .11786E-01 .37994E-01 .33858E-14 .21311E+00 .23676E+01 .79402E-14  
 .92000E+00 .15297E+01 .30154E+00 .19932E-13 .90512E-02 .40035E-01 .35800E-14 .37341E+00 .24436E+01 .76402E-14  
 .93000E+00 .15254E+01 .29291E+00 .19377E-13 .31570E-01 .40400E-01 .36636E-14 .52961E+00 .25175E+01 .73479E-14  
 .94000E+00 .15220E+01 .28431E+00 .18825E-13 .55503E-01 .39211E-01 .36448E-14 .68209E+00 .25498E+01 .70625E-14  
 .95000E+00 .15183E+01 .27572E+00 .18274E-13 .80608E-01 .36582E-01 .35312E-14 .83118E+00 .26604E+01 .67834E-14  
 .96000E+00 .15145E+01 .26713E+00 .17722E-13 .10667E+00 .32614E-01 .33296E-14 .97720E+00 .27296E+01 .65103E-14  
 .97000E+00 .15106E+01 .25853E+00 .17170E-13 .13351E+00 .27412E-01 .30461E-14 .11204E+01 .27375E+01 .62425E-14  
 .98000E+00 .15065E+01 .24991E+00 .16617E-13 .16195E+00 .21051E-01 .26866E-14 .12611E+01 .28642E+01 .59797E-14  
 .99000E+00 .15023E+01 .24125E+00 .16362E-13 .18894E+00 .13613E-01 .22561E-14 .13996E+01 .29298E+01 .57214E-14  
 .10000E+00 .14980E+01 .23254E+00 .15503E-13 .21705E+00 .51709E-02 .17596E-14 .15359E+01 .29446E+01 .54673E-14

THETA= .15708E+01

.88000E+00 .16407E+01 .52576E-13 .22531E-13 .76422E-01 .31809E-14 .20769E-14 .-32125E+00 .22356E+01 .13676E-26  
 .89000E+00 .16381E+01 .51186E-13 .21950E-13 .61419E-01 .44244E-14 .26695E-14 .-13449E+00 .23255E+01 .13173E-26  
 .90000E+00 .16352E+01 .49810E-13 .21375E-13 .43520E-01 .53314E-14 .31195E-14 .46502E-01 .24126E+01 .12636E-26  
 .91000E+00 .16321E+01 .48447E-13 .20805E-13 .23134E-01 .59335E-14 .34381E-14 .22223E+00 .24970E+01 .12212E-26  
 .92000E+00 .16287E+01 .47092E-13 .20239E-13 .62237E-03 .62523E-14 .36352E-14 .22223E+00 .25790E+01 .11750E-26  
 .93000E+00 .16252E+01 .45744E-13 .19676E-13 .32692E-01 .63092E-14 .37201E-14 .55975E+00 .26589E+01 .11301E-26  
 .94000E+00 .16215E+01 .44401E-13 .19115E-13 .49522E-01 .61235E-14 .37010E-14 .72237E+00 .27368E+01 .10862E-26  
 .95000E+00 .16176E+01 .43059E-13 .18556E-13 .76610E-01 .57131E-14 .35857E-14 .88133E+00 .28130E+01 .10433E-26  
 .96000E+00 .16136E+01 .41718E-13 .17996E-13 .10473E+00 .50939E-14 .33809E-14 .10371E+01 .29476E+01 .10013E-26  
 .97000E+00 .16094E+01 .40375E-13 .17435E-13 .13368E+00 .42809E-14 .30931E-14 .11899E+01 .29509E+01 .96008E-27  
 .98000E+00 .16050E+01 .39028E-13 .16873E-13 .16328E+00 .32875E-14 .27280E-14 .13400E+01 .30329E+01 .91966E-27  
 .99000E+00 .16005E+01 .37676E-13 .16309E-13 .19337E+00 .21259E-14 .22909E-14 .14876E+01 .31039E+01 .87994E-27  
 .10000E+00 .15959E+01 .36316E-13 .15742E-13 .22380E+00 .80754E-15 .17867E-14 .16331E+01 .31738E+01 .84085E-27

THETA= .17453E+01

.88000E+00 .15400E+01 .33666E+00 .22139E-13 .60993E-01 .20368E-01 .20453E-14 .-29658E+00 .21253E+01 .8921E-14  
 .89000E+00 .15375E+01 .32776E+00 .21617E-13 .47168E-01 .28318E-01 .26289E-14 .-12142E+00 .22047E+01 .85654E-14  
 .90000E+00 .15348E+01 .31895E+00 .21050E-13 .30639E-01 .34138E-01 .30721E-14 .48319E-01 .22344E+01 .82483E-14  
 .91000E+00 .15319E+01 .31022E+00 .20489E-13 .11786E-01 .37994E-01 .33858E-14 .21311E+00 .23676E+01 .79402E-14  
 .92000E+00 .15287E+01 .30154E+00 .19932E-13 .90512E-02 .40035E-01 .35800E-14 .37341E+00 .24436E+01 .76402E-14  
 .93000E+00 .15254E+01 .29291E+00 .19377E-13 .31570E-01 .40400E-01 .36636E-14 .52961E+00 .25175E+01 .73479E-14  
 .94000E+00 .15220E+01 .28431E+00 .18825E-13 .55503E-01 .39211E-01 .36448E-14 .68209E+00 .25498E+01 .70625E-14  
 .95000E+00 .15183E+01 .27572E+00 .18274E-13 .80608E-01 .36582E-01 .35312E-14 .83118E+00 .26604E+01 .67834E-14  
 .96000E+00 .15145E+01 .26713E+00 .17722E-13 .10667E+00 .32614E-01 .33296E-14 .97720E+00 .27296E+01 .65103E-14  
 .97000E+00 .15106E+01 .25853E+00 .17170E-13 .13351E+00 .27412E-01 .30461E-14 .11204E+01 .27375E+01 .62425E-14  
 .98000E+00 .15065E+01 .24991E+00 .16617E-13 .16195E+00 .21051E-01 .26866E-14 .12611E+01 .28642E+01 .59797E-14  
 .99000E+00 .15023E+01 .24125E+00 .16362E-13 .18894E+00 .13613E-01 .22561E-14 .13996E+01 .29298E+01 .57214E-14  
 .10000E+00 .14980E+01 .23254E+00 .15503E-13 .21705E+00 .51709E-02 .17596E-14 .15359E+01 .29446E+01 .54673E-14

THETA= .19199E+01

.88000E+00 .15400E+01 .33666E+00 .22139E-13 .60993E-01 .20368E-01 .20453E-14 .-29658E+00 .21253E+01 .8921E-14  
 .89000E+00 .15375E+01 .32776E+00 .21617E-13 .47168E-01 .28318E-01 .26289E-14 .-12142E+00 .22047E+01 .85654E-14  
 .90000E+00 .15348E+01 .31895E+00 .21050E-13 .30639E-01 .34138E-01 .30721E-14 .48319E-01 .22344E+01 .82483E-14  
 .91000E+00 .15319E+01 .31022E+00 .20489E-13 .11786E-01 .37994E-01 .33858E-14 .21311E+00 .23676E+01 .79402E-14  
 .92000E+00 .15287E+01 .30154E+00 .19932E-13 .90512E-02 .40035E-01 .35800E-14 .37341E+00 .24436E+01 .76402E-14  
 .93000E+00 .15254E+01 .29291E+00 .19377E-13 .31570E-01 .40400E-01 .36636E-14 .52961E+00 .25175E+01 .73479E-14  
 .94000E+00 .15220E+01 .28431E+00 .18825E-13 .55503E-01 .39211E-01 .36448E-14 .68209E+00 .25498E+01 .70625E-14  
 .95000E+00 .15183E+01 .27572E+00 .18274E-13 .80608E-01 .36582E-01 .35312E-14 .83118E+00 .26604E+01 .67834E-14  
 .96000E+00 .15145E+01 .26713E+00 .17722E-13 .10667E+00 .32614E-01 .33296E-14 .97720E+00 .27296E+01 .65103E-14  
 .97000E+00 .15106E+01 .25853E+00 .17170E-13 .13351E+00 .27412E-01 .30461E-14 .11204E+01 .27375E+01 .62425E-14  
 .98000E+00 .15065E+01 .24991E+00 .16617E-13 .16195E+00 .21051E-01 .26866E-14 .12611E+01 .28642E+01 .59797E-14  
 .99000E+00 .15023E+01 .24125E+00 .16362E-13 .18894E+00 .13613E-01 .22561E-14 .13996E+01 .29298E+01 .57214E-14  
 .10000E+00 .14980E+01 .23254E+00 .15503E-13 .21705E+00 .51709E-02 .17596E-14 .15359E+01 .29446E+01 .54673E-14

.88000E+00	.12499E+01	-.63272E+00	.21173E-13	-.16567E-01	-.38280E-01	.19516E-14	-.22553E+00	.18079E+01	-.17514E-13
.89000E+00	.12479E+01	-.61599E+00	.20626E-13	-.61361E-02	-.53221E-01	.25085E-14	-.83783E-01	.18724E+01	-.16870E-13
.90000E+00	.12457E+01	-.59943E+00	.20086E-13	.64515E-02	-.64159E-01	.29314E-14	.53551E-01	.19348E+01	-.16246E-13
.91000E+00	.12433E+01	-.58302E+00	.19550E-13	.20889E-01	-.71405E-01	.32307E-14	.18686E+00	.19952E+01	-.15639E-13
.92000E+00	.12408E+01	-.56672E+00	.19019E-13	.36905E-01	-.75242E-01	.34160E-14	.31652E+00	.20539E+01	-.15048E-13
.93000E+00	.12382E+01	-.55050E+00	.18490E-13	.54255E-01	-.75926E-01	.34957E-14	.44283E+00	.21110E+01	-.14473E-13
.94000E+00	.12354E+01	-.53433E+00	.17963E-13	.72725E-01	-.73692E-01	.34778E-14	.56612E+00	.21668E+01	-.13910E-13
.95000E+00	.12324E+01	-.51819E+00	.17436E-13	.92120E-01	-.68752E-01	.33694E-14	.68664E+00	.22212E+01	-.13361E-13
.96000E+00	.12294E+01	-.50204E+00	.16910E-13	.11227E+00	-.61302E-01	.31770E-14	.80467E+00	.22745E+01	-.12823E-13
.97000E+00	.12262E+01	-.48588E+00	.16384E-13	.13302E+00	-.51518E-01	.29066E-14	.92042E+00	.23268E+01	-.12295E-13
.98000E+00	.12229E+01	-.46967E+00	.15856E-13	.15425E+00	-.39562E-01	.25635E-14	.10341E+01	.23782E+01	-.11778E-13
.99000E+00	.12195E+01	-.45340E+00	.15326E-13	.17582E+00	-.25584E-01	.21528E-14	.11459E+01	.24288E+01	-.11269E-13
.10000E+01	.12160E+01	-.43704E+00	.14793E-13	.19763E+00	-.97181E-02	.16790E-14	.12561E+01	.24787E+01	-.10769E-13

FEE= .17453E+01

THETA= 0.

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.17004E+01	0.	0.	.43525E+00	0.	0.	.43922E+00	-.13626E+01	-.32790E+00
.89000E+00	-.16975E+01	0.	0.	.41117E+00	0.	0.	.24327E+00	-.14923E+01	-.31585E+00
.90000E+00	-.16944E+01	0.	0.	.38367E+00	0.	0.	.53128E-01	-.16162E+00	-.30416E+00
.91000E+00	-.16910E+01	0.	0.	.35321E+00	0.	0.	-.13174E+00	-.17406E+01	-.29279E+00
.92000E+00	-.16873E+01	0.	0.	.32018E+00	0.	0.	-.31181E+00	-.18599E+01	-.28173E+00
.93000E+00	-.16835E+01	0.	0.	.28497E+00	0.	0.	-.48752E+00	-.19764E+01	-.27095E+00
.94000E+00	-.16795E+01	0.	0.	.24788E+00	0.	0.	-.65927E+00	-.20903E+01	-.26043E+00
.95000E+00	-.16753E+01	0.	0.	.20920E+00	0.	0.	-.82744E+00	-.22019E+01	-.25014E+00
.96000E+00	-.16709E+01	0.	0.	.16919E+00	0.	0.	-.99237E+00	-.23115E+01	-.24007E+00
.97000E+00	-.16663E+01	0.	0.	.12808E+00	0.	0.	-.11544E+01	-.24193E+01	-.23019E+00
.98000E+00	-.16616E+01	0.	0.	.86069E-01	0.	0.	-.13137E+01	-.25253E+01	-.22050E+00
.99000E+00	-.16568E+01	0.	0.	.43337E-01	0.	0.	-.14707E+01	-.26300E+01	-.21098E+00
.10000E+01	-.16519E+01	0.	0.	.43952E-04	0.	0.	-.16255E+01	-.27333E+01	-.20161E+00

THETA= .17453E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.16010E+01	.33231E+00	-.25053E-01	.41972E+00	.19967E-01	-.23093E-02	.41478E+00	-.12538E+01	-.32292E+00
.89000E+00	-.15982E+01	.32352E+00	-.24407E-01	.39680E+00	.27803E-01	-.29682E-02	.23029E+00	-.13771E+01	-.31105E+00
.90000E+00	-.15953E+01	.31482E+00	-.23767E-01	.37065E+00	.33536E-01	-.34686E-02	.51248E-01	-.14967E+01	-.29954E+00
.91000E+00	-.15921E+01	.30620E+00	-.23134E-01	.34170E+00	.37330E-01	-.38228E-02	-.12283E+00	-.16131E+01	-.28435E+00
.92000E+00	-.15886E+01	.29764E+00	-.22504E-01	.30933E+00	.39334E-01	-.40420E-02	-.29239E+00	-.17264E+01	-.27745E+00
.93000E+00	-.15850E+01	.28911E+00	-.21879E-01	.27688E+00	.39681E-01	-.41364E-02	-.45786E+00	-.18371E+01	-.26684E+00
.94000E+00	-.15812E+01	.28062E+00	-.21255E-01	.24166E+00	.38496E-01	-.41153E-02	-.61961E+00	-.19454E+01	-.25647E+00
.95000E+00	-.15772E+01	.27214E+00	-.20632E-01	.20494E+00	.35890E-01	-.39870E-02	-.77799E+00	-.20515E+01	-.24634E+00
.96000E+00	-.15731E+01	.26366E+00	-.20010E-01	.16636E+00	.31965E-01	-.37593E-02	-.93332E+00	-.21556E+01	-.23642E+00
.97000E+00	-.15688E+01	.25517E+00	-.19387E-01	.12793E+00	.26815E-01	-.34393E-02	-.10859E+01	-.22580E+01	-.22670E+00
.98000E+00	-.15644E+01	.24665E+00	-.18762E-01	.88048E-01	.20524E-01	-.30334E-02	-.12360E+01	-.23589E+01	-.21715E+00
.99000E+00	-.15599E+01	.23810E+00	-.18135E-01	.47481E-01	.13171E-01	-.25474E-02	-.13838E+01	-.24583E+01	-.20777E+00
.10000E+01	-.15552E+01	.22950E+00	-.17504E-01	.63798E-02	.48259E-02	-.19867E-02	-.15296E+01	-.25565E+01	-.19854E+00

THETA= .34907E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.13146E+01	.62454E+00	-.49345E-01	.37499E+00	.37526E-01	-.45485E-02	.34441E+00	-.94075E+00	-.30812E+00
.89000E+00	-.13123E+01	.60802E+00	-.48072E-01	.35542E+00	.52252E-01	-.58463E-02	.19289E+00	-.10454E+01	-.25680E+00
.90000E+00	-.13099E+01	.59168E+00	-.46812E-01	.33316E+00	.63027E-01	-.68319E-02	.45834E-01	-.11469E+01	-.28581E+00
.91000E+00	-.13072E+01	.57547E+00	-.45564E-01	.30856E+00	.70158E-01	-.75295E-02	-.97169E-01	-.12457E+01	-.27514E+00
.92000E+00	-.13044E+01	.55937E+00	-.44325E-01	.28195E+00	.73923E-01	-.79613E-02	-.23649E+00	-.13420E+01	-.26474E+00
.93000E+00	-.13014E+01	.54336E+00	-.43092E-01	.25360E+00	.74576E-01	-.81472E-02	-.37246E+00	-.14360E+01	-.25461E+00
.94000E+00	-.12983E+01	.52739E+00	-.41864E-01	.22377E+00	.72349E-01	-.81055E-02	-.50540E+00	-.15280E+01	-.24472E+00
.95000E+00	-.12950E+01	.51145E+00	-.40638E-01	.19268E+00	.67451E-01	-.78529E-02	-.63559E+00	-.16182E+01	-.23505E+00
.96000E+00	-.12916E+01	.49551E+00	-.39412E-01	.16053E+00	.60075E-01	-.74044E-02	-.76329E+00	-.17067E+01	-.22559E+00
.97000E+00	-.12881E+01	.47955E+00	-.38184E-01	.12750E+00	.50395E-01	-.67741E-02	-.88874E+00	-.17938E+01	-.22163E+00
.98000E+00	-.12845E+01	.46355E+00	-.36954E-01	.93746E-01	.38572E-01	-.59745E-02	-.10127E+01	-.18795E+01	-.20720E+00
.99000E+00	-.12807E+01	.44748E+00	-.35719E-01	.59412E-01	.24753E-01	-.50173E-02	-.11338E+01	-.19640E+01	-.19825E+00
.10000E+01	-.12768E+01	.43133E+00	-.34477E-01	.24623E-01	.90698E-02	-.39130E-02	-.12537E+01	-.20476E+01	-.18945E+00

THETA= .52360E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.88000E+00	-.87584E+00	.84144E+00	-.72138E-01	.30647E+00	.50559E-01	-.66495E-02	.23060E+00	-.46108E+00	-.28397E+00
.89000E+00	-.87432E+00	.81919E+00	-.70276E-01	.29202E+00	.70399E-01	-.85467E-02	.13560E+00	-.53715E+00	-.27353E+00
.90000E+00	-.87267E+00	.79716E+00	-.68435E-01	.27572E+00	.84916E-01	-.99875E-02	.37540E-01	-.61103E+00	-.26341E+00
.91000E+00	-.87088E+00	.77533E+00	-.66611E-01	.25779E+00	.94523E-01	-.11007E-01	-.57859E-01	-.68294E+00	-.25357E+00
.92000E+00	-.86898E+00	.75364E+00	-.64799E-01	.23847E+00	.99596E-01	-.11639E-01	-.15084E+00	-.75306E+00	-.24399E+00
.93000E+00	-.86697E+00	.73206E+00	-.62997E-01	.21793E+00	.10048E+00	-.11910E-01	-.24163E+00	-.82157E+00	-.23465E+00
.94000E+00	-.86485E+00	.71055E+00	-.61201E-01	.19635E+00	.97476E-01	-.11849E-01	-.33042E+00	-.88862E+00	-.22554E+00
.95000E+00	-.86264E+00	.68908E+00	-.59408E-01	.17389E+00	.90877E-01	-.11480E-01	-.41742E+00	-.95437E+00	-.21663E+00



-96000E+00 -86035E+00  
 -97000E+00 -85798E+00  
 -98000E+00 -85552E+00  
 -99000E+00 -85300E+00  
 -10000E+01 -85041E+00  
 THETA= .69813E+00  
 -88000E+00 -33763E+00  
 -89000E+00 -33701E+00  
 -90000E+00 -33634E+00  
 -91000E+00 -33561E+00  
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 -93000E+00 -33401E+00  
 -94000E+00 -33315E+00  
 -95000E+00 -33225E+00  
 -96000E+00 -33132E+00  
 -97000E+00 -33036E+00  
 -98000E+00 -32937E+00  
 -99000E+00 -32835E+00  
 -10000E+01 -32731E+00  
 THETA= .87266E+00

R  
 UBAR  
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 -80939E-01 -10825E-01 -50279E+00 -10189E+01 -20790E+00  
 -67897E-01 -99031E-02 -58669E+00 -10825E+01 -19935E+00  
 -51969E-01 -87342E-02 -66926E+00 -11450E+01 -19096E+00  
 -33349E-01 -73348E-02 -75065E+00 -12068E+01 -18271E+00  
 -12220E-01 -57204E-02 -83097E+00 -12678E+01 -17460E+00  
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 -59096E-01 -11228E-01 -24864E+00 -24411E+00 -16891E+00  
 -37923E-01 -94295E-02 -28070E+00 -27785E+00 -16162E+00  
 -13896E-01 -73540E-02 -31239E+00 -31122E+00 -15444E+00

R  
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 -57493E-01 -10188E-01 -36401E-01 -75348E+00 -21077E+00  
 -80055E-01 -13094E-01 -94621E-02 -74973E+00 -20302E+00  
 -96563E-01 -15302E-01 -16538E-01 -74593E+00 -19551E+00  
 -10749E+00 -16864E-01 -41678E-01 -74209E+00 -18820E+00  
 -11326E+00 -17831E-01 -66030E-01 -73822E+00 -18110E+00  
 -11426E+00 -18248E-01 -89662E-01 -73433E+00 -17417E+00  
 -11085E+00 -18154E-01 -11263E+00 -73042E+00 -16740E+00  
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 -37923E-01 -11238E-01 -21941E+00 -71068E+00 -13561E+00  
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 -50559E-01 -11517E-01 -16866E+00 -13419E+01 -16395E+00  
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 -12220E-01 -99080E-02 -75803E+00 -16633E+01 -10090E+00

R  
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 -48897E-01 -12495E+00 -19628E-01 -37526E-01 -27647E+00  
 -53732E-01 -12172E+00 -19628E-01 -52252E-01 -13703E-01  
 -59818E-01 -11853E+00 -96644E-02 -63027E-01 -19312E-02  
 -66971E-01 -11537E+00 -23780E-02 -70158E-01 -20687E-01  
 -75029E-01 -11224E+00 -16203E-01 -70158E-01 -20687E-01  
 -83847E-01 -10911E+00 -12519E+00 -70158E-01 -20687E-01  
 -93296E-01 -10600E+00 -12519E+00 -70158E-01 -20687E-01  
 -10326E+00 -10290E+00 -12519E+00 -70158E-01 -20687E-01  
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 -15763E+00 -87299E-01 -12519E+00 -70158E-01 -20687E-01  
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 -59818E-01 -11853E+00 -96644E-02 -63027E-01 -19312E-02  
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 -83847E-01 -10911E+00 -12519E+00 -70158E-01 -20687E-01  
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 -14641E+00 -90443E-01 -12519E+00 -70158E-01 -20687E-01  
 -15763E+00 -87299E-01 -12519E+00 -70158E-01 -20687E-01

R  
 UBAR  
 VBAR  
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 SIRR  
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 SIFF  
 SIFV  
 -12217E+01  
 -88000E+00 -12121E+01  
 -89000E+00 -12101E+01  
 -90000E+00 -12080E+01  
 -91000E+00 -12057E+01  
 THETA= .12217E+01

92000E+00 .12032E+01 .55937E+00 .31547E-01 .73923E-01 .21873E-01 .25674E+00 .20496E+01 .-96359E-01  
93000E+00 .12006E+01 .54336E+00 .48176E-01 .74576E-01 .22384E-01 .38099E+00 .21021E+01 .-92672E-01  
94000E+00 .11978E+01 .52739E+00 .65879E-01 .72349E-01 .22270E-01 .50225E+00 .21542E+01 .-89072E-01  
95000E+00 .11950E+01 .51145E+00 .84472E-01 .67451E-01 .21576E-01 .62079E+00 .22046E+01 .-85553E-01  
96000E+00 .11920E+01 .49551E+00 .10379E+00 .60075E-01 .20344E-01 .73687E+00 .22540E+01 .-82108E-01  
97000E+00 .11898E+01 .47955E+00 .12368E+00 .50395E-01 .18612E-01 .85070E+00 .23024E+01 .-78731E-01  
98000E+00 .11856E+01 .46355E+00 .14402E+00 .38572E-01 .16415E-01 .96250E+00 .23500E+01 .-75416E-01  
99000E+00 .11823E+01 .44748E+00 .16469E+00 .24753E-01 .13785E-01 .10725E+01 .23969E+01 .-72159E-01  
10000E+01 .11789E+01 .43133E+00 .18558E+00 .90698E-02 .10751E-01 .11808E+01 .24431E+01 .-68954E-01

THETA= R

88000E+00 .14984E+01 .33231E+00 .-64355E-01 .19967E-01 .-13097E-01 .-36684E+00 .21346E+01 .-56939E-01  
89000E+00 .14960E+01 .32352E+00 .-51044E-01 .27803E-01 .-16834E-01 .-17442E+00 .22131E+01 .-54847E-01  
90000E+00 .14933E+01 .31482E+00 .-35113E-01 .33536E-01 .-19672E-01 .-73449E-02 .22890E+01 .-52816E-01  
91000E+00 .14905E+01 .30620E+00 .-16933E-01 .37330E-01 .-21680E-01 .15487E+00 .23626E+01 .-50843E-01  
92000E+00 .14874E+01 .29764E+00 .-24893E-01 .39334E-01 .-22924E-01 .31264E+00 .24340E+01 .-48923E-01  
93000E+00 .14842E+01 .28911E+00 .-12408E+00 .39681E-01 .-23439E-01 .46639E+00 .25036E+01 .-47051E-01  
94000E+00 .14807E+01 .28062E+00 .-12054E+00 .38496E-01 .-23339E-01 .61646E+00 .25715E+01 .-45223E-01  
95000E+00 .14772E+01 .27214E+00 .-11701E+00 .35890E-01 .-22611E-01 .76319E+00 .26379E+01 .-43436E-01  
96000E+00 .14735E+01 .26366E+00 .-11348E+00 .31965E-01 .-21320E-01 .90690E+00 .27029E+01 .-41687E-01  
97000E+00 .14696E+01 .25517E+00 .-10995E+00 .26815E-01 .-19505E-01 .10479E+01 .27667E+01 .-39973E-01  
98000E+00 .14656E+01 .24665E+00 .-10640E+00 .20524E-01 .-17203E-01 .11863E+01 .28294E+01 .-38290E-01  
99000E+00 .14615E+01 .23810E+00 .-10285E+00 .13171E-01 .-14447E-01 .13225E+01 .28911E+01 .-36636E-01  
10000E+01 .14572E+01 .22950E+00 .-99272E-01 .48259E-02 .-11267E-01 .14567E+01 .29520E+01 .-35009E-01

THETA= R

88000E+00 .15979E+01 .51897E-13 .-14428E+00 .31183E-14 .-13299E-01 .-37128E+00 .22434E+01 .-87570E-14  
89000E+00 .15953E+01 .50524E-13 .-14055E+00 .43419E-14 .-17093E-01 .-18741E+00 .23283E+01 .-84352E-14  
90000E+00 .15925E+01 .49166E-13 .-13687E+00 .52373E-14 .-19975E-01 .-92251E-02 .24105E+01 .-81230E-14  
91000E+00 .15894E+01 .47819E-13 .-13322E+00 .58298E-14 .-22015E-01 .16378E+00 .24901E+01 .-78195E-14  
92000E+00 .15861E+01 .46482E-13 .-12960E+00 .61427E-14 .-23277E-01 .33206E+00 .25676E+01 .-75242E-14  
93000E+00 .15826E+01 .45151E-13 .-12599E+00 .61970E-14 .-23821E-01 .49605E+00 .26429E+01 .-72363E-14  
94000E+00 .15790E+01 .43824E-13 .-12240E+00 .60119E-14 .-23699E-01 .65612E+00 .27165E+01 .-69552E-14  
95000E+00 .15752E+01 .42500E-13 .-11882E+00 .56049E-14 .-22960E-01 .81265E+00 .27884E+01 .-66804E-14  
96000E+00 .15712E+01 .41175E-13 .-11523E+00 .49920E-14 .-21649E-01 .96595E+00 .28588E+01 .-64114E-14  
97000E+00 .15671E+01 .39849E-13 .-11164E+00 .41877E-14 .-19806E-01 .11163E+01 .29279E+01 .-61477E-14  
98000E+00 .15628E+01 .38519E-13 .-10805E+00 .32052E-14 .-17468E-01 .12640E+01 .29959E+01 .-58888E-14  
99000E+00 .15584E+01 .37184E-13 .-10443E+00 .20569E-14 .-14670E-01 .14094E+01 .30628E+01 .-56345E-14  
10000E+01 .15539E+01 .35841E-13 .-10080E+00 .75366E-15 .-11441E-01 .15525E+01 .31288E+01 .-53843E-14

THETA= R

88000E+00 .14984E+01 .33231E+00 .-64355E-01 .19967E-01 .-13097E-01 .-36684E+00 .21346E+01 .-56939E-01  
89000E+00 .14960E+01 .32352E+00 .-51044E-01 .27803E-01 .-16834E-01 .-17442E+00 .22131E+01 .-54847E-01  
90000E+00 .14933E+01 .31482E+00 .-35113E-01 .33536E-01 .-19672E-01 .-73449E-02 .22890E+01 .-52816E-01  
91000E+00 .14905E+01 .30620E+00 .-16933E-01 .37330E-01 .-21680E-01 .15487E+00 .23626E+01 .-50843E-01  
92000E+00 .14874E+01 .29764E+00 .-24893E-01 .39334E-01 .-22924E-01 .31264E+00 .24340E+01 .-48923E-01  
93000E+00 .14842E+01 .28911E+00 .-12408E+00 .39681E-01 .-23439E-01 .46639E+00 .25036E+01 .-47051E-01  
94000E+00 .14807E+01 .28062E+00 .-12054E+00 .38496E-01 .-23339E-01 .61646E+00 .25715E+01 .-45223E-01  
95000E+00 .14772E+01 .27214E+00 .-11701E+00 .35890E-01 .-22611E-01 .76319E+00 .26379E+01 .-43436E-01  
96000E+00 .14735E+01 .26366E+00 .-11348E+00 .31965E-01 .-21320E-01 .90690E+00 .27029E+01 .-41687E-01  
97000E+00 .14696E+01 .25517E+00 .-10995E+00 .26815E-01 .-19505E-01 .10479E+01 .27667E+01 .-39973E-01  
98000E+00 .14656E+01 .24665E+00 .-10640E+00 .20524E-01 .-17203E-01 .11863E+01 .28294E+01 .-38290E-01  
99000E+00 .14615E+01 .23810E+00 .-10285E+00 .13171E-01 .-14447E-01 .13225E+01 .28911E+01 .-36636E-01  
10000E+01 .14572E+01 .22950E+00 .-99272E-01 .48259E-02 .-11267E-01 .14567E+01 .29520E+01 .-35009E-01

THETA= R

88000E+00 .14984E+01 .33231E+00 .-64355E-01 .19967E-01 .-13097E-01 .-36684E+00 .21346E+01 .-56939E-01  
89000E+00 .14960E+01 .32352E+00 .-51044E-01 .27803E-01 .-16834E-01 .-17442E+00 .22131E+01 .-54847E-01  
90000E+00 .14933E+01 .31482E+00 .-35113E-01 .33536E-01 .-19672E-01 .-73449E-02 .22890E+01 .-52816E-01  
91000E+00 .14905E+01 .30620E+00 .-16933E-01 .37330E-01 .-21680E-01 .15487E+00 .23626E+01 .-50843E-01  
92000E+00 .14874E+01 .29764E+00 .-24893E-01 .39334E-01 .-22924E-01 .31264E+00 .24340E+01 .-48923E-01  
93000E+00 .14842E+01 .28911E+00 .-12408E+00 .39681E-01 .-23439E-01 .46639E+00 .25036E+01 .-47051E-01  
94000E+00 .14807E+01 .28062E+00 .-12054E+00 .38496E-01 .-23339E-01 .61646E+00 .25715E+01 .-45223E-01  
95000E+00 .14772E+01 .27214E+00 .-11701E+00 .35890E-01 .-22611E-01 .76319E+00 .26379E+01 .-43436E-01  
96000E+00 .14735E+01 .26366E+00 .-11348E+00 .31965E-01 .-21320E-01 .90690E+00 .27029E+01 .-41687E-01  
97000E+00 .14696E+01 .25517E+00 .-10995E+00 .26815E-01 .-19505E-01 .10479E+01 .27667E+01 .-39973E-01  
98000E+00 .14656E+01 .24665E+00 .-10640E+00 .20524E-01 .-17203E-01 .11863E+01 .28294E+01 .-38290E-01  
99000E+00 .14615E+01 .23810E+00 .-10285E+00 .13171E-01 .-14447E-01 .13225E+01 .28911E+01 .-36636E-01  
10000E+01 .14572E+01 .22950E+00 .-99272E-01 .48259E-02 .-11267E-01 .14567E+01 .29520E+01 .-35009E-01

THETA= R

88000E+00 .14984E+01 .33231E+00 .-64355E-01 .19967E-01 .-13097E-01 .-36684E+00 .21346E+01 .-56939E-01  
89000E+00 .14960E+01 .32352E+00 .-51044E-01 .27803E-01 .-16834E-01 .-17442E+00 .22131E+01 .-54847E-01  
90000E+00 .14933E+01 .31482E+00 .-35113E-01 .33536E-01 .-19672E-01 .-73449E-02 .22890E+01 .-52816E-01  
91000E+00 .14905E+01 .30620E+00 .-16933E-01 .37330E-01 .-21680E-01 .15487E+00 .23626E+01 .-50843E-01  
92000E+00 .14874E+01 .29764E+00 .-24893E-01 .39334E-01 .-22924E-01 .31264E+00 .24340E+01 .-48923E-01  
93000E+00 .14842E+01 .28911E+00 .-12408E+00 .39681E-01 .-23439E-01 .46639E+00 .25036E+01 .-47051E-01  
94000E+00 .14807E+01 .28062E+00 .-12054E+00 .38496E-01 .-23339E-01 .61646E+00 .25715E+01 .-45223E-01  
95000E+00 .14772E+01 .27214E+00 .-11701E+00 .35890E-01 .-22611E-01 .76319E+00 .26379E+01 .-43436E-01  
96000E+00 .14735E+01 .26366E+00 .-11348E+00 .31965E-01 .-21320E-01 .90690E+00 .27029E+01 .-41687E-01  
97000E+00 .14696E+01 .25517E+00 .-10995E+00 .26815E-01 .-19505E-01 .10479E+01 .27667E+01 .-39973E-01  
98000E+00 .14656E+01 .24665E+00 .-10640E+00 .20524E-01 .-17203E-01 .11863E+01 .28294E+01 .-38290E-01  
99000E+00 .14615E+01 .23810E+00 .-10285E+00 .13171E-01 .-14447E-01 .13225E+01 .28911E+01 .-36636E-01  
10000E+01 .14572E+01 .22950E+00 .-99272E-01 .48259E-02 .-11267E-01 .14567E+01 .29520E+01 .-35009E-01

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.88000E+00	.12121E+01	-.62454E+00	-.13557E+00	-.19628E-01	-.37526E-01	-.12497E-01	-.27647E+00	.18215E+01	.11215E+00
.89000E+00	.12101E+01	-.60802E+00	-.13208E+00	-.96644E-02	-.52252E-01	-.16063E-01	-.13703E+00	.18814E+01	.10803E+00
.90000E+00	.12080E+01	-.59168E+00	-.12862E+00	-.23780E-02	-.63027E-01	-.18770E-01	-.19312E-02	.19392E+01	.10403E+00
.91000E+00	.12057E+01	-.57547E+00	-.12519E+00	.16203E-01	-.70158E-01	-.20687E-01	.12921E+00	.19952E+01	.10014E+00
.92000E+00	.12032E+01	-.55937E+00	-.12178E+00	.31547E-01	-.73923E-01	-.21873E-01	.25674E+00	.20496E+01	.96359E-01
.93000E+00	.12006E+01	-.54336E+00	-.11840E+00	.48176E-01	-.74576E-01	-.22384E-01	.38099E+00	.21026E+01	.92672E-01
.94000E+00	.11978E+01	-.52739E+00	-.11502E+00	.65979E-01	-.72349E-01	-.22270E-01	.50225E+00	.21542E+01	.89072E-01
.95000E+00	.11950E+01	-.51145E+00	-.11165E+00	.84472E-01	-.67451E-01	-.21576E-01	.62079E+00	.22046E+01	.85553E-01
.96000E+00	.11920E+01	-.49551E+00	-.10828E+00	.10379E+00	-.60075E-01	-.20344E-01	.73687E+00	.22540E+01	.82108E-01
.97000E+00	.11889E+01	-.47955E+00	-.10491E+00	.12368E+00	-.50395E-01	-.18612E-01	.85070E+00	.23024E+01	.78731E-01
.98000E+00	.11856E+01	-.46355E+00	-.10153E+00	.14402E+00	-.38572E-01	-.16415E-01	.96250E+00	.23500E+01	.75416E-01
.99000E+00	.11823E+01	-.44748E+00	-.98136E-01	.16469E+00	-.24753E-01	-.13785E-01	.10725E+01	.23969E+01	.72159E-01
.10000E+01	.11789E+01	-.43133E+00	-.94725E-01	.18558E+00	-.90698E-02	-.10751E-01	.11808E+01	.24431E+01	.68954E-01

# Set II, Model III --Crust

FEE= 0. (9-0)  
THETA= 0. (0-0)

R	UBAR (U)	VBAR (V)	WBAR (W)	SIRR (S <sub>r</sub> )	SIRT (S <sub>i</sub> )	SIRF (S <sub>r</sub> )	SITT (S <sub>i</sub> )	SIFF (S <sub>r</sub> )	SITF (S <sub>i</sub> )
.99000E+00	-.16568E+01	0.	0.	.43773E-01	0.	0.	-.26498E+01	-.14485E+01	0.
.99100E+00	-.16563E+01	0.	0.	.39466E-01	0.	0.	-.26600E+01	-.14642E+01	0.
.99200E+00	-.16558E+01	0.	0.	.35154E-01	0.	0.	-.26702E+01	-.14799E+01	0.
.99300E+00	-.16553E+01	0.	0.	.30836E-01	0.	0.	-.26804E+01	-.14956E+01	0.
.99400E+00	-.16548E+01	0.	0.	.26512E-01	0.	0.	-.26906E+01	-.15113E+01	0.
.99500E+00	-.16543E+01	0.	0.	.22182E-01	0.	0.	-.27007E+01	-.15270E+01	0.
.99600E+00	-.16538E+01	0.	0.	.17848E-01	0.	0.	-.27109E+01	-.15427E+01	0.
.99700E+00	-.16533E+01	0.	0.	.13508E-01	0.	0.	-.27210E+01	-.15583E+01	0.
.99800E+00	-.16528E+01	0.	0.	.91627E-02	0.	0.	-.27311E+01	-.15739E+01	0.
.99900E+00	-.16523E+01	0.	0.	.48129E-02	0.	0.	-.27412E+01	-.15895E+01	0.
.10000E+01	-.16518E+01	0.	0.	.45823E-03	0.	0.	-.27512E+01	-.16051E+01	0.

THETA= .17453E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.16005E+01	.13822E+00	0.	.36226E-01	.98573E-03	0.	-.26036E+01	-.13530E+01	0.
.99100E+00	-.16000E+01	.13772E+00	0.	.32660E-01	.88800E-03	0.	-.26130E+01	-.13682E+01	0.
.99200E+00	-.15995E+01	.13721E+00	0.	.29088E-01	.78492E-03	0.	-.26225E+01	-.13834E+01	0.
.99300E+00	-.15991E+01	.13671E+00	0.	.25511E-01	.67653E-03	0.	-.26319E+01	-.13985E+01	0.
.99400E+00	-.15986E+01	.13621E+00	0.	.21930E-01	.56287E-03	0.	-.26412E+01	-.14137E+01	0.
.99500E+00	-.15981E+01	.13570E+00	0.	.18343E-01	.44399E-03	0.	-.26506E+01	-.14288E+01	0.
.99600E+00	-.15976E+01	.13520E+00	0.	.14751E-01	.31994E-03	0.	-.26600E+01	-.14439E+01	0.
.99700E+00	-.15972E+01	.13469E+00	0.	.11155E-01	.19076E-03	0.	-.26693E+01	-.14589E+01	0.
.99800E+00	-.15967E+01	.13419E+00	0.	.75539E-02	.56438E-04	0.	-.26786E+01	-.14740E+01	0.
.99900E+00	-.15962E+01	.13369E+00	0.	.39486E-02	.82822E-04	0.	-.26879E+01	-.14890E+01	0.
.10000E+01	-.15957E+01	.13318E+00	0.	.33900E-03	.22713E-03	0.	-.26972E+01	-.15041E+01	0.

THETA= .34907E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.14384E+01	.25977E+00	0.	.14944E-01	.18526E-02	0.	-.24705E+01	-.10782E+01	0.
.99100E+00	-.14380E+01	.25883E+00	0.	.13060E-01	.16689E-02	0.	-.24777E+01	-.10918E+01	0.
.99200E+00	-.14375E+01	.25788E+00	0.	.11622E-01	.14752E-02	0.	-.24849E+01	-.11053E+01	0.
.99300E+00	-.14371E+01	.25693E+00	0.	.10181E-01	.12715E-02	0.	-.24921E+01	-.11189E+01	0.
.99400E+00	-.14367E+01	.25598E+00	0.	.87378E-02	.10578E-02	0.	-.24991E+01	-.11324E+01	0.
.99500E+00	-.14363E+01	.25504E+00	0.	.72871E-02	.83443E-03	0.	-.25062E+01	-.11459E+01	0.
.99600E+00	-.14359E+01	.25409E+00	0.	.58351E-02	.60129E-03	0.	-.25133E+01	-.11594E+01	0.
.99700E+00	-.14354E+01	.25314E+00	0.	.43798E-02	.35850E-03	0.	-.25204E+01	-.11729E+01	0.
.99800E+00	-.14350E+01	.25220E+00	0.	.29214E-02	.10616E-03	0.	-.25275E+01	-.11863E+01	0.
.99900E+00	-.14346E+01	.25125E+00	0.	.14600E-02	.15565E-03	0.	-.25345E+01	-.11998E+01	0.
.10000E+01	-.14341E+01	.25030E+00	0.	-.43311E-05	-.42687E-03	0.	-.25415E+01	-.12132E+01	0.

THETA= .52360E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.11900E+01	.34999E+00	0.	-.18801E-01	.24960E-02	0.	-.22667E+01	-.65710E+00	0.
.99100E+00	-.11897E+01	.34871E+00	0.	-.16968E-01	.22485E-02	0.	-.22704E+01	-.66823E+00	0.
.99200E+00	-.11893E+01	.34744E+00	0.	-.15136E-01	.19875E-02	0.	-.22741E+01	-.67934E+00	0.
.99300E+00	-.11890E+01	.34616E+00	0.	-.13307E-01	.17130E-02	0.	-.22777E+01	-.69043E+00	0.
.99400E+00	-.11887E+01	.34488E+00	0.	-.11478E-01	.14252E-02	0.	-.22814E+01	-.70150E+00	0.
.99500E+00	-.11883E+01	.34361E+00	0.	-.96510E-02	.11242E-02	0.	-.22851E+01	-.71256E+00	0.
.99600E+00	-.11880E+01	.34233E+00	0.	-.78250E-02	.81011E-03	0.	-.22887E+01	-.72359E+00	0.
.99700E+00	-.11876E+01	.34106E+00	0.	-.60000E-02	.48301E-03	0.	-.22923E+01	-.73461E+00	0.
.99800E+00	-.11873E+01	.33978E+00	0.	-.41759E-02	.14303E-03	0.	-.22959E+01	-.74561E+00	0.
.99900E+00	-.11869E+01	.33851E+00	0.	-.23528E-02	.20971E-03	0.	-.22995E+01	-.75659E+00	0.
.10000E+01	-.11866E+01	.33723E+00	0.	-.53034E-03	-.57512E-03	0.	-.23031E+01	-.76755E+00	0.

THETA= .69813E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.88534E+00	.39800E+00	0.	-.59642E-01	.28383E-02	0.	-.20166E+01	-.14056E+00	0.

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.99100E+00	-.88511E+00	.39654E+00	.0.	.53802E-01	.25569E-02	.0.	.20160E+01	-.14868E+00	.0.
.99200E+00	-.88488E+00	.39509E+00	.0.	-.47961E-01	.22601E-02	.0.	-.20155E+01	-.15678E+00	.0.
.99300E+00	-.88464E+00	.39364E+00	.0.	-.42118E-01	.19480E-02	.0.	-.20149E+01	-.16486E+00	.0.
.99400E+00	-.88441E+00	.39219E+00	.0.	-.36274E-01	.16207E-02	.0.	-.20143E+01	-.17292E+00	.0.
.99500E+00	-.88417E+00	.39074E+00	.0.	-.30429E-01	.12784E-02	.0.	-.20137E+01	-.18096E+00	.0.
.99600E+00	-.88393E+00	.38929E+00	.0.	-.24582E-01	.92122E-03	.0.	-.20131E+01	-.18899E+00	.0.
.99700E+00	-.88368E+00	.38784E+00	.0.	-.18733E-01	.54926E-03	.0.	-.20125E+01	-.19699E+00	.0.
.99800E+00	-.88343E+00	.38639E+00	.0.	-.12882E-01	.16265E-03	.0.	-.20119E+01	-.20498E+00	.0.
.99900E+00	-.88318E+00	.38494E+00	.0.	-.70298E-02	-.23848E-03	.0.	-.20112E+01	-.21294E+00	.0.
.10000E+01	-.88292E+00	.38349E+00	.0.	-.11756E-02	-.65400E-03	.0.	-.20106E+01	-.22089E+00	.0.
THETA= .87266E+00									
.99000E+00	-.56112E+00	.39800E+00	.0.	-.10311E+00	.28383E-02	.0.	-.17504E+01	.40913E+00	.0.
.99100E+00	-.56100E+00	.39654E+00	.0.	-.93001E-01	.25569E-02	.0.	-.17454E+01	.40421E+00	.0.
.99200E+00	-.56088E+00	.39509E+00	.0.	-.82892E-01	.22601E-02	.0.	-.17403E+01	.39931E+00	.0.
.99300E+00	-.56075E+00	.39364E+00	.0.	-.72779E-01	.19480E-02	.0.	-.17352E+01	.39443E+00	.0.
.99400E+00	-.56062E+00	.39219E+00	.0.	-.62662E-01	.16207E-02	.0.	-.17301E+01	.38958E+00	.0.
.99500E+00	-.56049E+00	.39074E+00	.0.	-.52540E-01	.12784E-02	.0.	-.17250E+01	.38474E+00	.0.
.99600E+00	-.56036E+00	.38929E+00	.0.	-.42413E-01	.92122E-03	.0.	-.17199E+01	.37993E+00	.0.
.99700E+00	-.56021E+00	.38784E+00	.0.	-.32283E-01	.54926E-03	.0.	-.17148E+01	.37513E+00	.0.
.99800E+00	-.56007E+00	.38639E+00	.0.	-.22147E-01	.16265E-03	.0.	-.17096E+01	.37035E+00	.0.
.99900E+00	-.55992E+00	.38494E+00	.0.	-.12007E-01	-.23848E-03	.0.	-.17045E+01	.36560E+00	.0.
.10000E+01	-.55977E+00	.38349E+00	.0.	-.18622E-02	-.65400E-03	.0.	-.16993E+01	.36086E+00	.0.
THETA= .10472E+01									
.99000E+00	-.25645E+00	.34999E+00	.0.	-.14395E+00	.24960E-02	.0.	-.15003E+01	.92566E+00	.0.
.99100E+00	-.25643E+00	.34871E+00	.0.	-.12984E+00	.22485E-02	.0.	-.14910E+01	.92375E+00	.0.
.99200E+00	-.25642E+00	.34744E+00	.0.	-.11727E+00	.19875E-02	.0.	-.14817E+01	.92187E+00	.0.
.99300E+00	-.25639E+00	.34616E+00	.0.	-.10159E+00	.17130E-02	.0.	-.14724E+01	.92000E+00	.0.
.99400E+00	-.25637E+00	.34488E+00	.0.	-.87458E-01	.14252E-02	.0.	-.14630E+01	.91816E+00	.0.
.99500E+00	-.25634E+00	.34361E+00	.0.	-.73318E-01	.11242E-02	.0.	-.14537E+01	.91633E+00	.0.
.99600E+00	-.25630E+00	.34233E+00	.0.	-.59170E-01	.81011E-03	.0.	-.14443E+01	.91453E+00	.0.
.99700E+00	-.25626E+00	.34106E+00	.0.	-.45015E-01	.48301E-03	.0.	-.14350E+01	.91275E+00	.0.
.99800E+00	-.25621E+00	.33978E+00	.0.	-.30853E-01	.14303E-03	.0.	-.14256E+01	.91099E+00	.0.
.99900E+00	-.25616E+00	.33851E+00	.0.	-.16684E-01	-.20971E-03	.0.	-.14162E+01	.90925E+00	.0.
.10000E+01	-.25611E+00	.33723E+00	.0.	-.25075E-02	-.57512E-03	.0.	-.14068E+01	.90753E+00	.0.
THETA= .12217E+01									
.99000E+00	-.80789E-02	.25977E+00	.0.	-.17724E+00	.18526E-02	.0.	-.12965E+01	.13467E+01	.0.
.99100E+00	-.81503E-02	.25883E+00	.0.	-.15986E+00	.16689E-02	.0.	-.12837E+01	.13473E+01	.0.
.99200E+00	-.82165E-02	.25788E+00	.0.	-.14248E+00	.14752E-02	.0.	-.12709E+01	.13479E+01	.0.
.99300E+00	-.82778E-02	.25693E+00	.0.	-.12508E+00	.12715E-02	.0.	-.12581E+01	.13484E+01	.0.
.99400E+00	-.83336E-02	.25598E+00	.0.	-.10767E+00	.10578E-02	.0.	-.12453E+01	.13491E+01	.0.
.99500E+00	-.83844E-02	.25504E+00	.0.	-.90256E-01	.83443E-03	.0.	-.12325E+01	.13497E+01	.0.
.99600E+00	-.84301E-02	.25409E+00	.0.	-.72830E-01	.60129E-03	.0.	-.12197E+01	.13503E+01	.0.
.99700E+00	-.84706E-02	.25314E+00	.0.	-.55395E-01	.35850E-03	.0.	-.12069E+01	.13510E+01	.0.
.99800E+00	-.85059E-02	.25220E+00	.0.	-.37951E-01	.10616E-03	.0.	-.11940E+01	.13517E+01	.0.
.99900E+00	-.85362E-02	.25125E+00	.0.	-.20497E-01	-.15565E-03	.0.	-.11812E+01	.13524E+01	.0.
.10000E+01	-.85612E-02	.25030E+00	.0.	-.30335E-02	-.42687E-03	.0.	-.11684E+01	.13532E+01	.0.
THETA= .13963E+01									
.99000E+00	.15403E+00	.13822E+00	.0.	-.19897E+00	.98573E-03	.0.	-.11634E+01	.16216E+01	.0.
.99100E+00	.15391E+00	.13772E+00	.0.	-.17946E+00	.88800E-03	.0.	-.11484E+01	.16237E+01	.0.
.99200E+00	.15378E+00	.13721E+00	.0.	-.15994E+00	.78492E-03	.0.	-.11333E+01	.16259E+01	.0.
.99300E+00	.15367E+00	.13671E+00	.0.	-.14041E+00	.67653E-03	.0.	-.11183E+01	.16281E+01	.0.
.99400E+00	.15356E+00	.13621E+00	.0.	-.12087E+00	.56287E-03	.0.	-.11032E+01	.16303E+01	.0.



.99500E+00 .15345E+00 .13570E+00 0. .16325E+01 0.  
.99600E+00 .15335E+00 .13520E+00 0. .16348E+01 0.  
.99700E+00 .15326E+00 .13469E+00 0. .16371E+01 0.  
.99800E+00 .15317E+00 .13419E+00 0. .16394E+01 0.  
.99900E+00 .15309E+00 .13369E+00 0. .16417E+01 0.  
.10000E+01 .15301E+00 .13318E+00 0. .16440E+01 0.  
THETA= .15708E+01

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	.21033E+00	.21526E-13	0.	-.20652E+00	.15394E-15	0.	-.1172E+01	.17170E+01	0.
.99100E+00	.21019E+00	.21507E-13	0.	-.18627E+00	.13868E-15	0.	-.11014E+01	.17197E+01	0.
.99200E+00	.21005E+00	.21429E-13	0.	-.16601E+00	.12258E-15	0.	-.10855E+01	.17225E+01	0.
.99300E+00	.20991E+00	.21350E-13	0.	-.14573E+00	.10565E-15	0.	-.10697E+01	.17252E+01	0.
.99400E+00	.20978E+00	.21271E-13	0.	-.12545E+00	.87903E-16	0.	-.10539E+01	.17280E+01	0.
.99500E+00	.20966E+00	.21192E-13	0.	-.10515E+00	.69338E-16	0.	-.10380E+01	.17308E+01	0.
.99600E+00	.20954E+00	.21114E-13	0.	-.84843E-01	.49965E-16	0.	-.10222E+01	.17336E+01	0.
.99700E+00	.20943E+00	.21035E-13	0.	-.64523E-01	.29790E-16	0.	-.10063E+01	.17364E+01	0.
.99800E+00	.20932E+00	.20956E-13	0.	-.44192E-01	.88217E-17	0.	-.99043E+00	.17393E+01	0.
.99900E+00	.20922E+00	.20878E-13	0.	-.23850E-01	.12934E-16	0.	-.97456E+00	.17422E+01	0.
.10000E+01	.20913E+00	.20799E-13	0.	-.34960E-02	-.35471E-16	0.	-.95868E+00	.17451E+01	0.

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	.15403E+00	-.13822E+00	0.	-.19857E+00	-.98573E-03	0.	-.11634E+01	.16216E+01	0.
.99100E+00	.15391E+00	-.13772E+00	0.	-.17946E+00	-.88800E-03	0.	-.11484E+01	.16237E+01	0.
.99200E+00	.15378E+00	-.13721E+00	0.	-.15944E+00	-.78492E-03	0.	-.11333E+01	.16259E+01	0.
.99300E+00	.15367E+00	-.13671E+00	0.	-.14041E+00	-.67653E-03	0.	-.11183E+01	.16281E+01	0.
.99400E+00	.15356E+00	-.13621E+00	0.	-.12087E+00	-.56287E-03	0.	-.11032E+01	.16303E+01	0.
.99500E+00	.15345E+00	-.13570E+00	0.	-.10131E+00	-.44399E-03	0.	-.10881E+01	.16325E+01	0.
.99600E+00	.15335E+00	-.13520E+00	0.	-.81746E-01	-.31994E-03	0.	-.10731E+01	.16348E+01	0.
.99700E+00	.15326E+00	-.13469E+00	0.	-.62170E-01	-.19076E-03	0.	-.10580E+01	.16371E+01	0.
.99800E+00	.15317E+00	-.13419E+00	0.	-.42583E-01	-.56488E-04	0.	-.10429E+01	.16394E+01	0.
.99900E+00	.15309E+00	-.13369E+00	0.	-.22985E-01	.82822E-04	0.	-.10278E+01	.16417E+01	0.
.10000E+01	.15301E+00	-.13318E+00	0.	-.33768E-02	-.22713E-03	0.	-.10127E+01	.16440E+01	0.

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.80789E-02	-.25977E+00	0.	-.17724E+00	-.18526E-02	0.	-.12965E+01	.13467E+01	0.
.99100E+00	-.81503E-02	-.25883E+00	0.	-.15986E+00	-.16689E-02	0.	-.12837E+01	.13473E+01	0.
.99200E+00	-.82165E-02	-.25788E+00	0.	-.14248E+00	-.14752E-02	0.	-.12709E+01	.13479E+01	0.
.99300E+00	-.82776E-02	-.25693E+00	0.	-.12508E+00	-.12715E-02	0.	-.12581E+01	.13484E+01	0.
.99400E+00	-.83336E-02	-.25598E+00	0.	-.10767E+00	-.10578E-02	0.	-.12453E+01	.13491E+01	0.
.99500E+00	-.83944E-02	-.25504E+00	0.	-.90256E-01	-.83443E-03	0.	-.12325E+01	.13497E+01	0.
.99600E+00	-.84301E-02	-.25409E+00	0.	-.72830E-01	-.63129E-03	0.	-.12197E+01	.13503E+01	0.
.99700E+00	-.84706E-02	-.25314E+00	0.	-.55395E-01	-.35850E-03	0.	-.12069E+01	.13510E+01	0.
.99800E+00	-.85059E-02	-.25220E+00	0.	-.37951E-01	-.10616E-03	0.	-.11940E+01	.13517E+01	0.
.99900E+00	-.85362E-02	-.25125E+00	0.	-.20497E-01	.15565E-03	0.	-.11812E+01	.13524E+01	0.
.10000E+01	-.85612E-02	-.25030E+00	0.	-.30333E-02	.42687E-03	0.	-.11684E+01	.13532E+01	0.



C114

FEE= .17453E+00

THETA= 0.

R	U8AR	V8AR	W8AR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.16568E+01	0.	0.	.43773E-01	0.	0.	-.26136E+01	-.14847E+01	.20544E+00
.99100E+00	-.16563E+01	0.	0.	.39466E-01	0.	0.	-.26240E+01	-.15003E+01	.20450E+00
.99200E+00	-.16558E+01	0.	0.	.35154E-01	0.	0.	-.26344E+01	-.15158E+01	.20355E+00
.99300E+00	-.16553E+01	0.	0.	.30836E-01	0.	0.	-.26447E+01	-.15314E+01	.20261E+00
.99400E+00	-.16548E+01	0.	0.	.26512E-01	0.	0.	-.26550E+01	-.15469E+01	.20167E+00
.99500E+00	-.16543E+01	0.	0.	.22182E-01	0.	0.	-.26654E+01	-.15624E+01	.20072E+00
.99600E+00	-.16538E+01	0.	0.	.17848E-01	0.	0.	-.26756E+01	-.15779E+01	.19978E+00
.99700E+00	-.16533E+01	0.	0.	.13508E-01	0.	0.	-.26859E+01	-.15933E+01	.19883E+00
.99800E+00	-.16528E+01	0.	0.	.91627E-02	0.	0.	-.26962E+01	-.16088E+01	.19789E+00
.99900E+00	-.16523E+01	0.	0.	.48129E-02	0.	0.	-.27064E+01	-.16242E+01	.19695E+00
.10000E+01	-.16518E+01	0.	0.	.45823E-03	0.	0.	-.27167E+01	-.16397E+01	.19600E+00

THETA= .17453E+00

R	U8AR	V8AR	W8AR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.15992E+01	.14129E+00	.17659E-01	.36573E-01	.13112E-02	.18742E-02	-.25661E+01	-.13869E+01	.20232E+00
.99100E+00	-.15988E+01	.14077E+00	.17596E-01	.32973E-01	.11828E-02	.16978E-02	-.25757E+01	-.14019E+01	.20139E+00
.99200E+00	-.15983E+01	.14026E+00	.17532E-01	.29368E-01	.10490E-02	.15206E-02	-.25853E+01	-.14169E+01	.20046E+00
.99300E+00	-.15978E+01	.13974E+00	.17468E-01	.25757E-01	.90963E-03	.13424E-02	-.25949E+01	-.14319E+01	.19953E+00
.99400E+00	-.15973E+01	.13923E+00	.17404E-01	.22141E-01	.76487E-03	.11633E-02	-.26044E+01	-.14469E+01	.19860E+00
.99500E+00	-.15969E+01	.13871E+00	.17340E-01	.18520E-01	.61475E-03	.98335E-03	-.26139E+01	-.14618E+01	.19767E+00
.99600E+00	-.15964E+01	.13820E+00	.17276E-01	.14895E-01	.45929E-03	.80249E-03	-.26235E+01	-.14768E+01	.19674E+00
.99700E+00	-.15959E+01	.13768E+00	.17212E-01	.11264E-01	.29855E-03	.62074E-03	-.26330E+01	-.14917E+01	.19581E+00
.99800E+00	-.15954E+01	.13717E+00	.17147E-01	.76291E-02	.13256E-03	.43811E-03	-.26425E+01	-.15066E+01	.19488E+00
.99900E+00	-.15949E+01	.13665E+00	.17083E-01	.39897E-02	.38612E-04	.25460E-03	-.26519E+01	-.15215E+01	.19395E+00
.10000E+01	-.15945E+01	.13614E+00	.17018E-01	.34596E-03	-.21494E-03	.70200E-04	-.26614E+01	-.15363E+01	.19302E+00

THETA= .34907E+00

R	U8AR	V8AR	W8AR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.14335E+01	.26554E+00	.34782E-01	.15842E-01	.24642E-02	.36915E-02	-.24293E+01	-.11052E+01	.19305E+00
.99100E+00	-.14331E+01	.26457E+00	.34657E-01	.14277E-01	.22230E-02	.33441E-02	-.24367E+01	-.11186E+01	.19217E+00
.99200E+00	-.14327E+01	.26360E+00	.34531E-01	.12707E-01	.19714E-02	.29949E-02	-.24440E+01	-.11321E+01	.19128E+00
.99300E+00	-.14322E+01	.26263E+00	.34406E-01	.11134E-01	.17095E-02	.26440E-02	-.24513E+01	-.11455E+01	.19039E+00
.99400E+00	-.14318E+01	.26166E+00	.34280E-01	.95655E-02	.14375E-02	.22913E-02	-.24587E+01	-.11589E+01	.18950E+00
.99500E+00	-.14314E+01	.26069E+00	.34154E-01	.79758E-02	.11553E-02	.19368E-02	-.24659E+01	-.11723E+01	.18862E+00
.99600E+00	-.14310E+01	.25973E+00	.34027E-01	.63916E-02	.86318E-03	.15806E-02	-.24732E+01	-.11856E+01	.18773E+00
.99700E+00	-.14305E+01	.25876E+00	.33901E-01	.48040E-02	.56108E-03	.12226E-02	-.24805E+01	-.11990E+01	.18684E+00
.99800E+00	-.14301E+01	.25779E+00	.33773E-01	.32133E-02	.24914E-03	.86291E-03	-.24877E+01	-.12123E+01	.18596E+00
.99900E+00	-.14297E+01	.25682E+00	.33646E-01	.16195E-02	.72567E-04	.50145E-03	-.24950E+01	-.12256E+01	.18507E+00
.10000E+01	-.14293E+01	.25586E+00	.33518E-01	.22674E-04	-.40396E-03	.13827E-03	-.25022E+01	-.12389E+01	.18418E+00

THETA= .52360E+00

R	U8AR	V8AR	W8AR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.11796E+01	.35776E+00	.50847E-01	-.15919E-01	.33200E-02	.53966E-02	-.22198E+01	-.67362E+00	.17792E+00
.99100E+00	-.11792E+01	.35645E+00	.50665E-01	-.14363E-01	.29950E-02	.48887E-02	-.22237E+01	-.68466E+00	.17710E+00
.99200E+00	-.11789E+01	.35515E+00	.50482E-01	-.12818E-01	.26561E-02	.43783E-02	-.22276E+01	-.69568E+00	.17628E+00
.99300E+00	-.11786E+01	.35384E+00	.50298E-01	-.11271E-01	.23033E-02	.38652E-02	-.22315E+01	-.70668E+00	.17547E+00
.99400E+00	-.11782E+01	.35254E+00	.50114E-01	-.97242E-02	.19367E-02	.33496E-02	-.22353E+01	-.71766E+00	.17465E+00
.99500E+00	-.11779E+01	.35123E+00	.49930E-01	-.81793E-02	.15566E-02	.28314E-02	-.22392E+01	-.72862E+00	.17383E+00
.99600E+00	-.11776E+01	.34993E+00	.49745E-01	-.66357E-02	.11030E-02	.23107E-02	-.22430E+01	-.73957E+00	.17301E+00
.99700E+00	-.11772E+01	.34863E+00	.49559E-01	-.50934E-02	.75595E-03	.17874E-02	-.22468E+01	-.75050E+00	.17220E+00
.99800E+00	-.11769E+01	.34732E+00	.49374E-01	-.35521E-02	.33567E-03	.12615E-02	-.22507E+01	-.76141E+00	.17138E+00
.99900E+00	-.11765E+01	.34602E+00	.49187E-01	-.20119E-02	.97769E-04	.73308E-03	-.22545E+01	-.77230E+00	.17056E+00
.10000E+01	-.11762E+01	.34471E+00	.49001E-01	-.47262E-03	-.54425E-03	.20213E-03	-.22582E+01	-.78317E+00	.16974E+00

THETA= .69813E+00

R	U8AR	V8AR	W8AR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.86808E+00	.40683E+00	.65368E-01	-.54880E-01	.37754E-02	.69377E-02	-.19628E+01	-.14423E+00	.15738E+00

99100E+00 -86786E+00  
99200E+00 -86753E+00  
99300E+00 -86741E+00  
99400E+00 -86717E+00  
99500E+00 -86694E+00  
99600E+00 -86670E+00  
99700E+00 -86646E+00  
99800E+00 -86621E+00  
99900E+00 -86597E+00  
10000E+00 -86572E+00  
THETA= .87266E+00

UBAR  
99000E+00 -53611E+00  
99100E+00 -53650E+00  
99200E+00 -53639E+00  
99300E+00 -53627E+00  
99400E+00 -53615E+00  
99500E+00 -53602E+00  
99600E+00 -53589E+00  
99700E+00 -53576E+00  
99800E+00 -53562E+00  
99900E+00 -53548E+00  
10000E+00 -53534E+00  
THETA= .10472E+01

UBAR  
99000E+00 -22513E+00  
99100E+00 -22512E+00  
99200E+00 -22511E+00  
99300E+00 -22510E+00  
99400E+00 -22508E+00  
99500E+00 -22506E+00  
99600E+00 -22503E+00  
99700E+00 -22500E+00  
99800E+00 -22496E+00  
99900E+00 -22492E+00  
10000E+00 -22488E+00  
THETA= .12217E+01

UBAR  
99000E+00 -28792E-01  
99100E+00 -28712E-01  
99200E+00 -28637E-01  
99300E+00 -28566E-01  
99400E+00 -28501E-01  
99500E+00 -28440E-01  
99600E+00 -28384E-01  
99700E+00 -28333E-01  
99800E+00 -28286E-01  
99900E+00 -28245E-01  
10000E+00 -28208E-01  
THETA= .13963E+01

UBAR  
99000E+00 -19453E+00  
99100E+00 -19439E+00  
99200E+00 -19426E+00  
99300E+00 -19413E+00  
99400E+00 -19401E+00  
99500E+00 -19389E+00  
99600E+00 -19377E+00  
99700E+00 -19365E+00  
99800E+00 -19353E+00  
99900E+00 -19341E+00  
10000E+00 -19329E+00  
THETA= .15015E+00

VBAR  
40534E+00  
40386E+00  
40237E+00  
40089E+00  
39941E+00  
39792E+00  
39644E+00  
39496E+00  
39348E+00  
39199E+00

VBAR  
40683E+00  
40534E+00  
40386E+00  
40237E+00  
40089E+00  
39941E+00  
39792E+00  
39644E+00  
39496E+00  
39348E+00  
39199E+00

VBAR  
35776E+00  
35645E+00  
35515E+00  
35384E+00  
35254E+00  
35123E+00  
34993E+00  
34863E+00  
34732E+00  
34602E+00  
34471E+00

VBAR  
26554E+00  
26457E+00  
26360E+00  
26263E+00  
26166E+00  
26069E+00  
25973E+00  
25876E+00  
25779E+00  
25682E+00  
25586E+00

VBAR  
14129E+00  
14077E+00  
14026E+00  
13975E+00  
13923E+00  
13872E+00  
13821E+00  
13770E+00  
13719E+00  
13668E+00  
13617E+00  
THETA= .16019E+01

SIRT  
34058E-02  
30204E-02  
26192E-02  
22024E-02  
17701E-02  
13225E-02  
85963E-03  
38171E-03  
11118E-03  
61890E-03

SIRT  
37754E-02  
34058E-02  
30204E-02  
26192E-02  
22024E-02  
17701E-02  
13225E-02  
85963E-03  
38171E-03  
11118E-03  
61890E-03

SIRT  
33200E-02  
29950E-02  
26561E-02  
23033E-02  
19367E-02  
15566E-02  
11630E-02  
75595E-03  
3357E-03  
97769E-04  
54425E-03

SIRT  
24642E-02  
22230E-02  
19714E-02  
17095E-02  
14375E-02  
11553E-02  
86318E-03  
56108E-03  
24914E-03  
72567E-04  
40396E-03

SIRT  
12112E-02  
11828E-02  
10490E-02  
90963E-03  
76487E-03  
65975E-02  
5416E-01  
4269E-01  
3534E-01  
2828E-01  
2122E-01  
THETA= .10859E+01

SIRF  
62848E-02  
56286E-02  
49691E-02  
43062E-02  
36705E-02  
29700E-02  
22978E-02  
16217E-02  
94243E-03  
25986E-03

SIRF  
82680E-02  
74900E-02  
67079E-02  
59219E-02  
51319E-02  
43380E-02  
35402E-02  
27384E-02  
19327E-02  
11231E-02  
30969E-03

SIRF  
93471E-02  
84675E-02  
75834E-02  
66948E-02  
58017E-02  
49022E-02  
40042E-02  
30958E-02  
21850E-02  
12697E-02  
35011E-03

SIRF  
10142E-01  
91878E-02  
82285E-02  
72643E-02  
62952E-02  
53214E-02  
43426E-02  
33591E-02  
23708E-02  
13777E-02  
37989E-03

SIRF  
13801E+01  
13805E+01  
13810E+01  
13815E+01  
13820E+01  
13825E+01  
13830E+01  
13835E+01  
13840E+01  
13845E+01  
13850E+01  
THETA= .16618E+01

SITF  
15666E+00  
15593E+00  
15521E+00  
15449E+00  
15376E+00  
15304E+00  
15232E+00  
15159E+00  
15087E+00  
15015E+00

SITF  
41914E+00  
41421E+00  
40931E+00  
40442E+00  
39956E+00  
39471E+00  
38988E+00  
38507E+00  
38028E+00  
37551E+00  
37076E+00

SITF  
94853E+00  
94657E+00  
94462E+00  
94270E+00  
94080E+00  
93891E+00  
93705E+00  
93521E+00  
93338E+00  
93158E+00  
92979E+00

SITF  
13801E+01  
13805E+01  
13810E+01  
13815E+01  
13820E+01  
13825E+01  
13830E+01  
13835E+01  
13840E+01  
13845E+01  
13850E+01  
THETA= .16618E+01

SITF  
16618E+01  
16618E+01  
16618E+01  
16618E+01  
16618E+01  
16618E+01  
16618E+01  
16618E+01  
16618E+01  
16618E+01  
16618E+01  
THETA= .16618E+01

C15

.99500E+00	.13871E+00	.98342E-01	-.95602E-01	.61475E-03	-.5768E-02	-.10121E+01	.16721E+01	.34855E-01
.99600E+00	.13820E+00	.97978E-01	-.77133E-01	.45929E-03	.45511E-02	-.99734E+00	.16742E+01	.34691E-01
.99700E+00	.13768E+00	.97613E-01	-.58653E-01	.29855E-03	.35204E-02	-.98256E+00	.16764E+01	.34527E-01
.99800E+00	.13717E+00	.97247E-01	-.40163E-01	.13256E-03	.24846E-02	-.96778E+00	.16786E+01	.34363E-01
.99900E+00	.13665E+00	.96880E-01	-.21663E-01	-.38612E-04	.14439E-02	-.95300E+00	.16808E+01	.34199E-01
.10000E+01	.13614E+00	.96512E-01	-.31529E-02	-.21494E-03	.39813E-03	-.93821E+00	.16830E+01	.34035E-01
THETA= .15708E+01								
.99000E+00	.22065E-13	.10169E+00	-.19499E+00	.20477E-15	.10793E-01	-.10384E+01	.17596E+01	.54867E-14
.99100E+00	.21985E-13	.10133E+00	-.17587E+00	.18472E-15	.97774E-02	-.10229E+01	.17622E+01	.54615E-14
.99200E+00	.21904E-13	.10096E+00	-.15673E+00	.16382E-15	.87566E-02	-.10073E+01	.17648E+01	.54363E-14
.99300E+00	.21824E-13	.10060E+00	-.13759E+00	.14206E-15	.77305E-02	-.99179E+00	.17674E+01	.54110E-14
.99400E+00	.21743E-13	.10023E+00	-.11843E+00	.11945E-15	.66932E-02	-.97625E+00	.17700E+01	.53858E-14
.99500E+00	.21663E-13	.99859E-01	-.99264E-01	.96005E-16	.56629E-02	-.96071E+00	.17727E+01	.53606E-14
.99600E+00	.21582E-13	.99489E-01	-.80086E-01	.71727E-16	.46213E-02	-.94516E+00	.17754E+01	.53354E-14
.99700E+00	.21502E-13	.99119E-01	-.60897E-01	.46624E-16	.35747E-02	-.92950E+00	.17781E+01	.53102E-14
.99800E+00	.21421E-13	.98747E-01	-.41697E-01	.20703E-16	.25230E-02	-.91405E+00	.17808E+01	.52850E-14
.99900E+00	.21341E-13	.98375E-01	-.22486E-01	.60301E-17	.14662E-02	-.89848E+00	.17835E+01	.52598E-14
.10000E+01	.21261E-13	.98001E-01	-.32652E-02	-.33567E-16	.40427E-03	-.88292E+00	.17863E+01	.52345E-14
THETA= .17453E+01								
.99000E+00	.14129E+00	.10015E+00	-.18779E+00	-.13112E-02	.10629E-01	-.10859E+01	.16618E+01	.35675E-01
.99100E+00	.14077E+00	.99790E-01	-.16938E+00	-.11828E-02	.96289E-02	-.10711E+01	.16638E+01	.35511E-01
.99200E+00	.14026E+00	.99429E-01	-.15095E+00	-.10490E-02	.86235E-02	-.10564E+01	.16659E+01	.35347E-01
.99300E+00	.13974E+00	.99068E-01	-.13251E+00	-.90963E-03	.76130E-02	-.10416E+01	.16679E+01	.35183E-01
.99400E+00	.13923E+00	.98705E-01	-.11406E+00	-.76487E-03	.65975E-02	-.10269E+01	.16700E+01	.35019E-01
.99500E+00	.13871E+00	.98342E-01	-.95602E-01	.61475E-03	.55768E-02	-.10121E+01	.16721E+01	.34855E-01
.99600E+00	.13820E+00	.97978E-01	-.77133E-01	.45929E-03	.45511E-02	-.99734E+00	.16742E+01	.34691E-01
.99700E+00	.13768E+00	.97613E-01	-.58653E-01	.29855E-03	.35204E-02	-.98256E+00	.16764E+01	.34527E-01
.99800E+00	.13717E+00	.97247E-01	-.40163E-01	.13256E-03	.24846E-02	-.96778E+00	.16786E+01	.34363E-01
.99900E+00	.13665E+00	.96880E-01	-.21663E-01	.38612E-04	.14439E-02	-.95300E+00	.16808E+01	.34199E-01
.10000E+01	.13614E+00	.96512E-01	-.31529E-02	.21494E-03	.39813E-03	-.93821E+00	.16830E+01	.34035E-01
THETA= .19199E+01								
.99000E+00	.28792E-01	.95562E-01	-.16706E+00	-.24642E-02	.10142E-01	-.12227E+01	.13801E+01	.70266E-01
.99100E+00	.28712E-01	.95219E-01	-.15068E+00	-.22230E-02	.91878E-02	-.12102E+01	.13805E+01	.69943E-01
.99200E+00	.28637E-01	.94874E-01	-.13429E+00	-.19714E-02	.82285E-02	-.11977E+01	.13810E+01	.69620E-01
.99300E+00	.28566E-01	.94529E-01	-.11789E+00	-.17095E-02	.72643E-02	-.11851E+01	.13815E+01	.69297E-01
.99400E+00	.28501E-01	.94184E-01	-.10148E+00	-.14375E-02	.62952E-02	-.11726E+01	.13820E+01	.68974E-01
.99500E+00	.28440E-01	.93837E-01	-.85058E-01	-.11553E-02	.53214E-02	-.11601E+01	.13826E+01	.68651E-01
.99600E+00	.28384E-01	.93489E-01	-.68630E-01	-.86318E-03	.43426E-02	-.11476E+01	.13831E+01	.68328E-01
.99700E+00	.28333E-01	.93141E-01	-.52193E-01	-.56108E-03	.33591E-02	-.11351E+01	.13837E+01	.68005E-01
.99800E+00	.28286E-01	.92792E-01	-.35747E-01	-.24914E-03	.23708E-02	-.11225E+01	.13843E+01	.67682E-01
.99900E+00	.28245E-01	.92442E-01	-.19293E-01	.72567E-04	.13777E-02	-.11100E+01	.13849E+01	.67360E-01
.10000E+01	.28208E-01	.92091E-01	-.28296E-02	.40396E-03	.37989E-03	-.10974E+01	.13855E+01	.67037E-01

FEE= .34907E+00

THETA= 0.

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.16568E+01	0.	0.	.43773E-01	0.	0.	-.25093E+01	-.15890E+01	.38611E+00
.99100E+00	-.16563E+01	0.	0.	.39466E-01	0.	0.	-.25202E+01	-.16041E+01	.38433E+00
.99200E+00	-.16558E+01	0.	0.	.35154E-01	0.	0.	-.25310E+01	-.16192E+01	.38256E+00
.99300E+00	-.16553E+01	0.	0.	.30836E-01	0.	0.	-.25418E+01	-.16342E+01	.38078E+00
.99400E+00	-.16548E+01	0.	0.	.26512E-01	0.	0.	-.25526E+01	-.16493E+01	.37901E+00
.99500E+00	-.16543E+01	0.	0.	.22182E-01	0.	0.	-.25634E+01	-.16643E+01	.37723E+00
.99600E+00	-.16538E+01	0.	0.	.17848E-01	0.	0.	-.25742E+01	-.16793E+01	.37546E+00
.99700E+00	-.16533E+01	0.	0.	.13508E-01	0.	0.	-.25850E+01	-.16943E+01	.37369E+00
.99800E+00	-.16528E+01	0.	0.	.91627E-02	0.	0.	-.25957E+01	-.17093E+01	.37191E+00
.99900E+00	-.16523E+01	0.	0.	.48129E-02	0.	0.	-.26065E+01	-.17242E+01	.37014E+00
.10000E+00	-.16518E+01	0.	0.	.45823E-03	0.	0.	-.26172E+01	-.17392E+01	.36836E+00

THETA= .17453E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.15956E+01	.15012E+00	.33188E-01	.37574E-01	.22483E-02	.35224E-02	-.24581E+01	-.14843E+01	.38024E+00
.99100E+00	-.15951E+01	.14957E+00	.33069E-01	.33876E-01	.20317E-02	.31909E-02	-.24682E+01	-.14989E+01	.37849E+00
.99200E+00	-.15947E+01	.14902E+00	.32950E-01	.30173E-01	.18092E-02	.28577E-02	-.24783E+01	-.15135E+01	.37675E+00
.99300E+00	-.15942E+01	.14848E+00	.32830E-01	.26464E-01	.15808E-02	.25229E-02	-.24883E+01	-.15280E+01	.37500E+00
.99400E+00	-.15937E+01	.14793E+00	.32710E-01	.22750E-01	.13465E-02	.21863E-02	-.24984E+01	-.15425E+01	.37325E+00
.99500E+00	-.15932E+01	.14738E+00	.32589E-01	.19031E-01	.11064E-02	.18481E-02	-.25084E+01	-.15570E+01	.37150E+00
.99600E+00	-.15928E+01	.14684E+00	.32469E-01	.15308E-01	.86053E-03	.15082E-02	-.25184E+01	-.15715E+01	.36976E+00
.99700E+00	-.15923E+01	.14629E+00	.32348E-01	.11579E-01	.60892E-03	.11666E-02	-.25284E+01	-.15860E+01	.36801E+00
.99800E+00	-.15918E+01	.14574E+00	.32226E-01	.78457E-02	.35162E-03	.82338E-03	-.25384E+01	-.16004E+01	.36626E+00
.99900E+00	-.15913E+01	.14519E+00	.32105E-01	.41081E-02	.88685E-04	.47848E-03	-.25483E+01	-.16149E+01	.36451E+00
.10000E+00	-.15908E+01	.14465E+00	.31983E-01	.36600E-03	.17984E-03	.13193E-03	-.25583E+01	-.16293E+01	.36277E+00

THETA= .34907E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.14194E+01	.28213E+00	.65368E-01	.19725E-01	.42254E-02	.69377E-02	-.23107E+01	-.11830E+01	.36282E+00
.99100E+00	-.14190E+01	.28110E+00	.65133E-01	.17780E-01	.38184E-02	.62848E-02	-.23186E+01	-.11960E+01	.36116E+00
.99200E+00	-.14186E+01	.28007E+00	.64898E-01	.15830E-01	.34003E-02	.56286E-02	-.23264E+01	-.12091E+01	.35949E+00
.99300E+00	-.14182E+01	.27905E+00	.64662E-01	.13877E-01	.29710E-02	.49691E-02	-.23343E+01	-.12221E+01	.35782E+00
.99400E+00	-.14178E+01	.27802E+00	.64425E-01	.11920E-01	.25307E-02	.43062E-02	-.23421E+01	-.12351E+01	.35615E+00
.99500E+00	-.14174E+01	.27699E+00	.64188E-01	.99585E-02	.20794E-02	.36400E-02	-.23499E+01	-.12481E+01	.35448E+00
.99600E+00	-.14169E+01	.27596E+00	.63951E-01	.79938E-02	.16173E-02	.29705E-02	-.23577E+01	-.12611E+01	.35282E+00
.99700E+00	-.14165E+01	.27493E+00	.63712E-01	.60255E-02	.11444E-02	.22978E-02	-.23655E+01	-.12741E+01	.35115E+00
.99800E+00	-.14161E+01	.27390E+00	.63473E-01	.40377E-02	.66083E-03	.16217E-02	-.23733E+01	-.12870E+01	.34948E+00
.99900E+00	-.14157E+01	.27288E+00	.63234E-01	.20787E-02	.16667E-03	.94243E-03	-.23810E+01	-.13000E+01	.34782E+00
.10000E+00	-.14152E+01	.27185E+00	.62994E-01	.10043E-03	.33799E-03	.25986E-03	-.23888E+01	-.13129E+01	.34615E+00

THETA= .52360E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.11495E+01	.38011E+00	.95562E-01	-.76218E-02	.56929E-02	.10142E-01	-.20849E+01	-.72121E+00	.33438E+00
.99100E+00	-.11492E+01	.37873E+00	.95219E-01	-.68816E-02	.51446E-02	.91878E-02	-.20893E+01	-.73198E+00	.33284E+00
.99200E+00	-.11489E+01	.37734E+00	.94874E-01	-.61436E-02	.45812E-02	.82285E-02	-.20938E+01	-.74273E+00	.33131E+00
.99300E+00	-.11485E+01	.37596E+00	.94529E-01	-.54077E-02	.40028E-02	.72643E-02	-.20982E+01	-.75347E+00	.32977E+00
.99400E+00	-.11482E+01	.37457E+00	.94184E-01	-.46738E-02	.34095E-02	.62952E-02	-.21027E+01	-.76419E+00	.32823E+00
.99500E+00	-.11479E+01	.37319E+00	.93837E-01	-.39418E-02	.28016E-02	.53214E-02	-.21071E+01	-.77489E+00	.32669E+00
.99600E+00	-.11475E+01	.37180E+00	.93489E-01	-.32115E-02	.21789E-02	.43426E-02	-.21115E+01	-.78557E+00	.32516E+00
.99700E+00	-.11472E+01	.37042E+00	.93141E-01	-.24830E-02	.15418E-02	.33591E-02	-.21159E+01	-.79624E+00	.32362E+00
.99800E+00	-.11469E+01	.36903E+00	.92792E-01	-.17560E-02	.89033E-03	.23708E-02	-.21203E+01	-.80689E+00	.32208E+00
.99900E+00	-.11465E+01	.36765E+00	.92442E-01	-.10305E-02	.22456E-03	.13777E-02	-.21247E+01	-.81753E+00	.32055E+00
.10000E+00	-.11462E+01	.36626E+00	.92091E-01	-.30644E-03	.45537E-03	.37989E-03	-.21291E+01	-.82814E+00	.31901E+00

THETA= .69813E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.81841E+00	.43225E+00	.12285E+00	-.41167E-01	.64737E-02	.13039E-01	-.18078E+01	-.15479E+00	.29578E+00



.99100E+00 - .81820E+00 .43067E+00 .12241E+00 - .37133E-01 .58502E-02 .1812E-01 - .18081E+01 - .16274E+00 .29442E+00  
 .99200E+00 - .81798E+00 .42910E+00 .12197E+00 - .33099E-01 .52095E-02 .10578E-01 - .18084E+01 - .17068E+00 .29306E+00  
 .99300E+00 - .81777E+00 .42752E+00 .12152E+00 - .29064E-01 .45518E-02 .93388E-02 - .18087E+01 - .17859E+00 .29170E+00  
 .99400E+00 - .81755E+00 .42595E+00 .12108E+00 - .25029E-01 .38772E-02 .80930E-02 - .18090E+01 - .18649E+00 .29034E+00  
 .99500E+00 - .81732E+00 .42437E+00 .12063E+00 - .20993E-01 .31858E-02 .68410E-02 - .18093E+01 - .19437E+00 .28898E+00  
 .99600E+00 - .81710E+00 .42280E+00 .12019E+00 - .16957E-01 .24778E-02 .5528E-02 - .18095E+01 - .20223E+00 .28762E+00  
 .99700E+00 - .81687E+00 .42122E+00 .11974E+00 - .12920E-01 .21753E-02 .43184E-02 - .18098E+01 - .21008E+00 .28626E+00  
 .99800E+00 - .81664E+00 .41965E+00 .11929E+00 - .88827E-02 .10124E-02 .30479E-02 - .18100E+01 - .21791E+00 .28490E+00  
 .99900E+00 - .81641E+00 .41807E+00 .11884E+00 - .48449E-02 .25536E-03 .17712E-02 - .18103E+01 - .22572E+00 .28354E+00  
 .10000E+01 - .81618E+00 .41649E+00 .11839E+00 - .80555E-03 - .51783E-03 .48837E-03 - .18105E+01 - .23352E+00 .28218E+00  
 THETA= .37266E+00

.99000E+00 - .46606E+00 .43225E+00 .14641E+00 - .76866E-01 .64737E-02 .15539E-01 - .15130E+01 .44797E+00 .24819E+00  
 .99100E+00 - .46596E+00 .43067E+00 .14588E+00 - .69328E-01 .58502E-02 .14077E-01 - .15089E+01 .44303E+00 .24704E+00  
 .99200E+00 - .46587E+00 .42910E+00 .14536E+00 - .61784E-01 .52095E-02 .12607E-01 - .15047E+01 .43810E+00 .2450E+00  
 .99300E+00 - .46577E+00 .42752E+00 .14483E+00 - .54238E-01 .45518E-02 .11130E-01 - .15006E+01 .43318E+00 .24476E+00  
 .99400E+00 - .46566E+00 .42595E+00 .14430E+00 - .46690E-01 .38772E-02 .96449E-02 - .14965E+01 .42829E+00 .24362E+00  
 .99500E+00 - .46556E+00 .42437E+00 .14377E+00 - .39139E-01 .31858E-02 .81528E-02 - .14923E+01 .42341E+00 .24248E+00  
 .99600E+00 - .46545E+00 .42280E+00 .14323E+00 - .31584E-01 .24778E-02 .66533E-02 - .14881E+01 .41855E+00 .24134E+00  
 .99700E+00 - .46533E+00 .42122E+00 .14270E+00 - .24027E-01 .17533E-02 .51465E-02 - .14840E+01 .41370E+00 .24020E+00  
 .99800E+00 - .46522E+00 .41965E+00 .14217E+00 - .16467E-01 .10124E-02 .36323E-02 - .14798E+01 .40888E+00 .23906E+00  
 .99900E+00 - .46510E+00 .41807E+00 .14163E+00 - .89033E-02 .25536E-03 .21108E-02 - .14756E+01 .40407E+00 .23792E+00  
 .10000E+01 - .46498E+00 .41649E+00 .14109E+00 - .13367E-02 - .51783E-03 .58202E-03 - .14714E+01 .39927E+00 .23678E+00  
 THETA= .10472E+01

.99000E+00 - .13496E+00 .38011E+00 .16552E+00 - .11041E+00 .56929E-02 .17567E-01 - .12360E+01 .10144E+01 .19305E+00  
 .99100E+00 - .13497E+00 .37873E+00 .16492E+00 - .99578E-01 .51446E-02 .15914E-01 - .12277E+01 .10123E+01 .19217E+00  
 .99200E+00 - .13499E+00 .37734E+00 .16433E+00 - .88739E-01 .45812E-02 .14252E-01 - .12194E+01 .10102E+01 .19128E+00  
 .99300E+00 - .13499E+00 .37596E+00 .16373E+00 - .77894E-01 .40028E-02 .12582E-01 - .12111E+01 .10081E+01 .19039E+00  
 .99400E+00 - .13500E+00 .37457E+00 .16313E+00 - .67045E-01 .34075E-02 .10904E-01 - .12028E+01 .10060E+01 .18950E+00  
 .99500E+00 - .13500E+00 .37319E+00 .16253E+00 - .56190E-01 .28016E-02 .92169E-02 - .11945E+01 .10039E+01 .18862E+00  
 .99600E+00 - .13500F+00 .37180E+00 .16193E+00 - .45330E-01 .21789E-02 .75217E-02 - .11861E+01 .10019E+01 .18773E+00  
 .99700E+00 - .13499E+00 .37042E+00 .16133E+00 - .34644E-01 .15418E-02 .58182E-02 - .11778E+01 .99987E+00 .18684E+00  
 .99800E+00 - .13498E+00 .36903E+00 .16072E+00 - .23593E-01 .89033E-03 .41064E-02 - .11695E+01 .99786E+00 .18596E+00  
 .99900E+00 - .13497E+00 .36765E+00 .16011E+00 - .12717E-01 .22556E-03 .23863E-02 - .11612E+01 .99587E+00 .18507E+00  
 .10000E+01 - .13496E+00 .36626E+00 .15951E+00 - .18358E-02 - .45537E-03 .65798E-03 - .11529E+01 .99390E+00 .18418E+00  
 THETA= .12217E+01

.99000E+00 .13496E+00 .28213E+00 .17960E+00 - .13776E+00 .42254E-02 .19061E-01 - .10101E+01 .14761E+01 .13206E+00  
 .99100E+00 .13485E+00 .28110E+00 .17895E+00 - .12424E+00 .38184E-02 .17267E-01 - .99843E+00 .14763E+01 .13145E+00  
 .99200E+00 .13475E+00 .28007E+00 .17831E+00 - .11071E+00 .34003E-02 .15464E-01 - .98674E+00 .14765E+01 .13084E+00  
 .99300E+00 .13465E+00 .27905E+00 .17766E+00 - .97179E-01 .29710E-02 .13652E-01 - .97504E+00 .14767E+01 .13024E+00  
 .99400E+00 .13456E+00 .27802E+00 .17701E+00 - .83638E-01 .25307E-02 .11831E-01 - .96335E+00 .14769E+01 .12963E+00  
 .99500E+00 .13447E+00 .27699E+00 .17636E+00 - .70090E-01 .20794E-02 .10001E-01 - .95166E+00 .14772E+01 .12902E+00  
 .99600E+00 .13438E+00 .27596E+00 .17570E+00 - .56535E-01 .16173E-02 .81615E-02 - .93996E+00 .14774E+01 .12841E+00  
 .99700E+00 .13430E+00 .27493E+00 .17505E+00 - .42973E-01 .11444E-02 .63131E-02 - .92826E+00 .14777E+01 .12781E+00  
 .99800E+00 .13423E+00 .27390E+00 .17439E+00 - .29403E-01 .66083E-03 .44557E-02 - .91656E+00 .14780E+01 .12720E+00  
 .99900E+00 .13415E+00 .27288E+00 .17373E+00 - .15826E-01 .16667E-03 .25893E-02 - .90485E+00 .14783E+01 .12659E+00  
 .10000E+01 .13408E+00 .27185E+00 .17307E+00 - .22427E-02 - .33799E-03 .71395E-03 - .89314E+00 .14786E+01 .12599E+00  
 THETA= .13963E+01

.99000E+00 .31113E+00 .15012E+00 .18822E+00 - .15501E+00 .22483E-02 .19976E-01 - .86270E+00 .17775E+01 .67047E-01  
 .99100E+00 .31097E+00 .14957E+00 .18754E+00 - .14534E+00 .20317E-02 .18096E-01 - .84880E+00 .17792E+01 .66739E-01  
 .99200E+00 .31081E+00 .14902E+00 .18687E+00 - .12505E+00 .18092E-02 .16207E-01 - .83489E+00 .17809E+01 .66431E-01  
 .99300E+00 .31065E+00 .14848E+00 .18619E+00 - .10977E+00 .15808E-02 .14308E-01 - .82099E+00 .17826E+01 .66122E-01  
 .99400E+00 .31050E+00 .14793E+00 .18551E+00 - .94469E-01 .13465E-02 .12399E-01 - .80708E+00 .17843E+01 .65814E-01  
 THETA= .13963E+01

.99500E+00	.31036E+00	.14738E+00	.18482E+00	-.79163E-01	.11064E-02	.10481E-01	-.79318E+00	.17861E+01	.65506E-01
.99600E+00	.31021E+00	.14684E+00	.18414E+00	-.63849E-01	.86053E-03	.85533E-02	-.77927E+00	.17878E+01	.65198E-01
.99700E+00	.31007E+00	.14629E+00	.18345E+00	-.48526E-01	.60892E-03	.66162E-02	-.76536E+00	.17896E+01	.64890E-01
.99800E+00	.30994E+00	.14574E+00	.18276E+00	-.33195E-01	.35162E-03	.46696E-02	-.75145E+00	.17914E+01	.64582E-01
.99900E+00	.30981E+00	.14519E+00	.18207E+00	-.17856E-01	.88685E-04	.27136E-02	-.73754E+00	.17932E+01	.64274E-01
.10000E+01	.30968E+00	.14465E+00	.18138E+00	-.25082E-02	.17984E-03	.74823E-03	-.72363E+00	.17950E+01	.63966E-01
THETA= .15708E+01									
.99000E+00	.37232E+00	.23444E-13	.19112E+00	-.16181E+00	.35111E-15	.20284E-01	-.81151E+00	.18822E+01	.10312E-13
.99100E+00	.37213E+00	.23359E-13	.19044E+00	-.14593E+00	.31730E-15	.1876E-01	-.79683E+00	.18844E+01	.10264E-13
.99200E+00	.37195E+00	.23273E-13	.18975E+00	-.13004E+00	.28255E-15	.16457E-01	-.78216E+00	.18866E+01	.10217E-13
.99300E+00	.37178E+00	.23188E-13	.18906E+00	-.11414E+00	.24688E-15	.14529E-01	-.76749E+00	.18888E+01	.10169E-13
.99400E+00	.37161E+00	.23102E-13	.18837E+00	-.98230E-01	.21029E-15	.1259E-01	-.75281E+00	.18911E+01	.10122E-13
.99500E+00	.37144E+00	.23017E-13	.18767E+00	-.82314E-01	.17279E-15	.1063E-01	-.73814E+00	.18933E+01	.10075E-13
.99600E+00	.37128E+00	.22931E-13	.18698E+00	-.66389E-01	.13439E-15	.86853E-02	-.72346E+00	.18956E+01	.10027E-13
.99700E+00	.37112E+00	.22846E-13	.18628E+00	-.50455E-01	.95094E-16	.67183E-02	-.70878E+00	.18979E+01	.99799E-14
.99800E+00	.37096E+00	.22760E-13	.18558E+00	-.34512E-01	.54912E-16	.47416E-02	-.69411E+00	.19002E+01	.99325E-14
.99900E+00	.37081E+00	.22675E-13	.18488E+00	-.18561E-01	.13850E-16	.27555E-02	-.67943E+00	.19026E+01	.98851E-14
.10000E+01	.37067E+00	.22589E-13	.18418E+00	-.26005E-02	.28086E-16	.75977E-03	-.66475E+00	.19049E+01	.98377E-14
THETA= .17453E+01									
.99000E+00	.31113E+00	-.15012E+00	.18822E+00	-.15561E+00	-.22483E-02	.19976E-01	-.86270E+00	.17775E+01	-.67047E-01
.99100E+00	.31097E+00	-.14957E+00	.18754E+00	-.14034E+00	-.20317E-02	.18096E-01	-.84880E+00	.17792E+01	-.66739E-01
.99200E+00	.31081E+00	-.14902E+00	.18687E+00	-.12505E+00	-.18092E-02	.16207E-01	-.83489E+00	.17809E+01	-.66431E-01
.99300E+00	.31065E+00	-.14848E+00	.18619E+00	-.10977E+00	-.15808E-02	.14308E-01	-.82099E+00	.17826E+01	-.66122E-01
.99400E+00	.31050E+00	-.14793E+00	.18551E+00	-.94469E-01	-.13465E-02	.12399E-01	-.80708E+00	.17843E+01	-.65814E-01
.99500E+00	.31036E+00	-.14738E+00	.18482E+00	-.79163E-01	-.11064E-02	.10481E-01	-.79318E+00	.17861E+01	-.65506E-01
.99600E+00	.31021E+00	-.14684E+00	.18414E+00	-.63849E-01	-.86053E-03	.85533E-02	-.77927E+00	.17878E+01	-.65198E-01
.99700E+00	.31007E+00	-.14629E+00	.18345E+00	-.48526E-01	-.60892E-03	.66162E-02	-.76536E+00	.17896E+01	-.64890E-01
.99800E+00	.30994E+00	-.14574E+00	.18276E+00	-.33195E-01	-.35162E-03	.46696E-02	-.75145E+00	.17914E+01	-.64582E-01
.99900E+00	.30981E+00	-.14519E+00	.18207E+00	-.17856E-01	-.88685E-04	.27136E-02	-.73754E+00	.17932E+01	-.64274E-01
.10000E+01	.30968E+00	-.14465E+00	.18138E+00	-.25082E-02	.17984E-03	.74823E-03	-.72363E+00	.17950E+01	-.63966E-01
THETA= .19199E+01									
.99000E+00	.13496E+00	-.28213E+00	.17960E+00	-.13776E+00	-.42254E-02	.19061E-01	-.10101E+01	.14761E+01	-.13206E+00
.99100E+00	.13485E+00	-.28110E+00	.17895E+00	-.12424E+00	-.38124E-02	.17267E-01	-.99843E+00	.14763E+01	-.13145E+00
.99200E+00	.13475E+00	-.28007E+00	.17831E+00	-.11071E+00	-.34003E-02	.15464E-01	-.98674E+00	.14765E+01	-.13094E+00
.99300E+00	.13465E+00	-.27905E+00	.17766E+00	-.97179E-01	-.29710E-02	.13652E-01	-.97504E+00	.14767E+01	-.13024E+00
.99400E+00	.13456E+00	-.27802E+00	.17701E+00	-.83638E-01	-.25307E-02	.11831E-01	-.96333E+00	.14769E+01	-.12963E+00
.99500E+00	.13447E+00	-.27699E+00	.17636E+00	-.70090E-01	-.20794E-02	.10001E-01	-.95166E+00	.14772E+01	-.12902E+00
.99600E+00	.13438E+00	-.27596E+00	.17570E+00	-.56535E-01	-.16173E-02	.81615E-02	-.93966E+00	.14774E+01	-.12841E+00
.99700E+00	.13430E+00	-.27493E+00	.17505E+00	-.42973E-01	-.11444E-02	.63131E-02	-.92826E+00	.14777E+01	-.12781E+00
.99800E+00	.13423E+00	-.27390E+00	.17439E+00	-.29403E-01	-.66083E-03	.44557E-02	-.91656E+00	.14780E+01	-.12720E+00
.99900E+00	.13415E+00	-.27288E+00	.17373E+00	-.21582E-01	-.16667E-03	.25893E-02	-.90485E+00	.14783E+01	-.12659E+00
.10000E+01	.13408E+00	-.27185E+00	.17307E+00	-.22427E-02	.33799E-03	.71395E-03	-.89314E+00	.14786E+01	-.12599E+00



FEE= .52360E+00

THETA= 0.

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.16568E+01	0.	.43773E-01	0.	0.	-.23495E+01	-.17488E+01	.52020E+00
.99100E+00	-.16563E+01	0.	.39466E-01	0.	0.	-.23611E+01	-.17632E+01	.51781E+00
.99200E+00	-.16558E+01	0.	.35154E-01	0.	0.	-.23727E+01	-.17775E+01	.51542E+00
.99300E+00	-.16553E+01	0.	.30836E-01	0.	0.	-.23842E+01	-.17918E+01	.51303E+00
.99400E+00	-.16548E+01	0.	.26512E-01	0.	0.	-.23958E+01	-.18061E+01	.51064E+00
.99500E+00	-.16543E+01	0.	.22182E-01	0.	0.	-.24073E+01	-.18204E+01	.50825E+00
.99600E+00	-.16538E+01	0.	.17848E-01	0.	0.	-.24188E+01	-.18347E+01	.50586E+00
.99700E+00	-.16533E+01	0.	.13508E-01	0.	0.	-.24303E+01	-.18490E+01	.50347E+00
.99800E+00	-.16528E+01	0.	.91627E-02	0.	0.	-.24418E+01	-.18632E+01	.50107E+00
.99900E+00	-.16523E+01	0.	.48129E-02	0.	0.	-.24533E+01	-.18774E+01	.49868E+00
.10000E+00	-.16518E+01	0.	.45823E-03	0.	0.	-.24647E+01	-.18916E+01	.49629E+00

THETA= .17453E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.15900E+01	.16365E+00	.39107E-01	.36840E-02	.47471E-02	-.22926E+01	-.16337E+01	.51230E+00
.99100E+00	-.15896E+01	.16305E+00	.35259E-01	.33324E-02	.42991E-02	-.23035E+01	-.16475E+01	.50994E+00
.99200E+00	-.15891E+01	.16245E+00	.31406E-01	.29741E-02	.38502E-02	-.23143E+01	-.16614E+01	.50759E+00
.99300E+00	-.15886E+01	.16186E+00	.27547E-01	.26091E-02	.33990E-02	-.23251E+01	-.16752E+01	.50523E+00
.99400E+00	-.15882E+01	.16126E+00	.23684E-01	.22377E-02	.29456E-02	-.23359E+01	-.16891E+01	.50288E+00
.99500E+00	-.15877E+01	.16067E+00	.19814E-01	.18597E-02	.24899E-02	-.23467E+01	-.17029E+01	.50052E+00
.99600E+00	-.15872E+01	.16007E+00	.15940E-01	.14753E-02	.20320E-02	-.23575E+01	-.17167E+01	.49817E+00
.99700E+00	-.15867E+01	.15947E+00	.12061E-01	.10844E-02	.15718E-02	-.23682E+01	-.17304E+01	.49582E+00
.99800E+00	-.15863E+01	.15888E+00	.81777E-02	.68723E-03	.11093E-02	-.23789E+01	-.17442E+01	.49346E+00
.99900E+00	-.15858E+01	.15828E+00	.42894E-02	.38727E-03	.64466E-03	-.23896E+01	-.17579E+01	.49111E+00
.10000E+00	-.15853E+01	.15768E+00	.39671E-03	.12606E-03	.17775E-03	-.24003E+01	-.17717E+01	.48876E+00

THETA= .34907E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.13979E+01	.30755E+00	.25673E-01	.69237E-02	.93471E-02	-.21289E+01	-.13021E+01	.48883E+00
.99100E+00	-.13975E+01	.30643E+00	.23146E-01	.62628E-02	.84675E-02	-.21376E+01	-.13146E+01	.48658E+00
.99200E+00	-.13971E+01	.30531E+00	.20615E-01	.55894E-02	.75834E-02	-.21463E+01	-.13271E+01	.48434E+00
.99300E+00	-.13967E+01	.30419E+00	.18080E-01	.49036E-02	.66948E-02	-.21549E+01	-.13395E+01	.48209E+00
.99400E+00	-.13962E+01	.30307E+00	.15540E-01	.42055E-02	.58017E-02	-.21635E+01	-.13520E+01	.47984E+00
.99500E+00	-.13958E+01	.30195E+00	.12996E-01	.34951E-02	.49042E-02	-.21722E+01	-.13644E+01	.47760E+00
.99600E+00	-.13954E+01	.30083E+00	.10449E-01	.27726E-02	.40022E-02	-.21808E+01	-.13768E+01	.47535E+00
.99700E+00	-.13950E+01	.29971E+00	.78968E-02	.20381E-02	.30958E-02	-.21894E+01	-.13892E+01	.47310E+00
.99800E+00	-.13946E+01	.29859E+00	.53413E-02	.12916E-02	.21850E-02	-.21979E+01	-.14016E+01	.47086E+00
.99900E+00	-.13942E+01	.29747E+00	.27822E-02	.53321E-03	.12697E-02	-.22065E+01	-.14139E+01	.46861E+00
.10000E+00	-.13937E+01	.29635E+00	.21956E-03	.12692E-03	.15011E-03	-.22150E+01	-.14263E+01	.46636E+00

THETA= .52360E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.11035E+01	.41437E+00	.50902E-02	.93283E-02	.13665E-01	-.18781E+01	-.79411E+00	.45051E+00
.99100E+00	-.11031E+01	.41286E+00	.45879E-02	.84278E-02	.12379E-01	-.18835E+01	-.80448E+00	.44744E+00
.99200E+00	-.11028E+01	.41135E+00	.40826E-02	.75306E-02	.11086E-01	-.18888E+01	-.81483E+00	.44437E+00
.99300E+00	-.11025E+01	.40984E+00	.35746E-02	.66066E-02	.97871E-02	-.18941E+01	-.82516E+00	.44130E+00
.99400E+00	-.11022E+01	.40833E+00	.30638E-02	.56660E-02	.84816E-02	-.18995E+01	-.83547E+00	.43822E+00
.99500E+00	-.11019E+01	.40682E+00	.25505E-02	.47089E-02	.71694E-02	-.19048E+01	-.84577E+00	.43515E+00
.99600E+00	-.11016E+01	.40531E+00	.20346E-02	.37355E-02	.58508E-02	-.19101E+01	-.85606E+00	.43208E+00
.99700E+00	-.11012E+01	.40380E+00	.15164E-02	.27459E-02	.45257E-02	-.19154E+01	-.86633E+00	.42901E+00
.99800E+00	-.11009E+01	.40229E+00	.99583E-03	.17401E-02	.31942E-02	-.19206E+01	-.87658E+00	.42594E+00
.99900E+00	-.11006E+01	.40079E+00	.47306E-03	.71840E-03	.18562E-02	-.19259E+01	-.88682E+00	.42287E+00
.10000E+00	-.11003E+01	.39927E+00	.12407E+00	.12407E+00	.51182E-03	-.19312E+01	-.89705E+00	.41980E+00

THETA= .69813E+00

UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.74230E+00	.47120E+00	.16552E+00	.10608E-01	.17567E-01	-.15704E+01	-.17098E+00	.39850E+00

.99100E+00	-.74211E+00	.46949E+00	.16492E+00	-.18177E-01	-.95952E-02	.15914E-01	-.15717E+01	-.17873E+00	.39667E+00
.99200E+00	-.74191E+00	.46777E+00	.16433E+00	-.16198E-01	.85635E-02	.14252E-01	-.15730E+01	-.18648E+00	.39483E+00
.99300E+00	-.74171E+00	.46605E+00	.16373E+00	-.14219E-01	.75127E-02	.12582E-01	-.15742E+01	-.19420E+00	.39300E+00
.99400E+00	-.74151E+00	.46434E+00	.16313E+00	-.12241E-01	.64431E-02	.10904E-01	-.15755E+01	-.20191E+00	.39117E+00
.99500E+00	-.74131E+00	.46262E+00	.16253E+00	-.10263E-01	.53548E-02	.92169E-02	-.15768E+01	-.20961E+00	.38934E+00
.99600E+00	-.74111E+00	.46090E+00	.16193E+00	-.82855E-02	.42479E-02	.75217E-02	-.15780E+01	-.21729E+00	.38751E+00
.99700E+00	-.74091E+00	.45919E+00	.16133E+00	-.63104E-02	.31225E-02	.58182E-02	-.15792E+01	-.22496E+00	.38568E+00
.99800E+00	-.74070E+00	.45747E+00	.16072E+00	-.43347E-02	.19788E-02	.41064E-02	-.15805E+01	-.23261E+00	.38385E+00
.99900E+00	-.74049E+00	.45575E+00	.16011E+00	-.23595E-02	.81693E-03	.23863E-02	-.15817E+01	-.24025E+00	.38201E+00
.10000E+01	-.74028E+00	.45403E+00	.15951E+00	-.38476E-03	-.36299E-03	.65798E-03	-.15829E+01	-.24788E+00	.38018E+00
THETA= .87266E+00									
.99000E+00	-.35797E+00	.47120E+00	.19726E+00	-.47027E-01	.10608E-01	.20935E-01	-.12430E+01	.49215E+00	.33438E+00
.99100E+00	-.35790E+00	.46949E+00	.19655E+00	-.42404E-01	.95952E-02	.18965E-01	-.12399E+01	.48717E+00	.33284E+00
.99200E+00	-.35782E+00	.46777E+00	.19584E+00	-.37780E-01	.85635E-02	.16985E-01	-.12369E+01	.48220E+00	.33131E+00
.99300E+00	-.35775E+00	.46605E+00	.19513E+00	-.33154E-01	.75127E-02	.14995E-01	-.12338E+01	.47725E+00	.32977E+00
.99400E+00	-.35768E+00	.46434E+00	.19441E+00	-.28527E-01	.64431E-02	.12994E-01	-.12308E+01	.47231E+00	.32823E+00
.99500E+00	-.35760E+00	.46262E+00	.19370E+00	-.23899E-01	.53548E-02	.10984E-01	-.12277E+01	.46738E+00	.32669E+00
.99600E+00	-.35752E+00	.46090E+00	.19298E+00	-.19270E-01	.42479E-02	.89640E-02	-.12246E+01	.46247E+00	.32516E+00
.99700E+00	-.35744E+00	.45919E+00	.19226E+00	-.14639E-01	.31225E-02	.69338E-02	-.12215E+01	.45757E+00	.32362E+00
.99800E+00	-.35735E+00	.45747E+00	.19154E+00	-.10007E-01	.19788E-02	.48938E-02	-.12185E+01	.45268E+00	.32208E+00
.99900E+00	-.35727E+00	.45575E+00	.19082E+00	-.53739E-02	.81693E-03	.28439E-02	-.12154E+01	.44781E+00	.32055E+00
.10000E+01	-.35718E+00	.45403E+00	.19009E+00	-.73905E-03	-.36299E-03	.78416E-03	-.12123E+01	.44295E+00	.31901E+00
THETA= .10472E+01									
.99000E+00	.31919E-02	.41437E+00	.22300E+00	-.72275E-01	.93283E-02	.23668E-01	-.93530E+00	.11153E+01	.26010E+00
.99100E+00	.31444E-02	.41286E+00	.22220E+00	-.65169E-01	.84378E-02	.21441E-01	-.92818E+00	.11129E+01	.25891E+00
.99200E+00	.30991E-02	.41135E+00	.22140E+00	-.58060E-01	.75306E-02	.19202E-01	-.92105E+00	.11106E+01	.25771E+00
.99300E+00	.30560E-02	.40984E+00	.22059E+00	-.50947E-01	.66066E-02	.16952E-01	-.91393E+00	.11082E+01	.25651E+00
.99400E+00	.30151E-02	.40833E+00	.21979E+00	-.43832E-01	.56660E-02	.14690E-01	-.90680E+00	.11059E+01	.25532E+00
.99500E+00	.29764E-02	.40682E+00	.21898E+00	-.36713E-01	.47089E-02	.12418E-01	-.89968E+00	.11035E+01	.25412E+00
.99600E+00	.29398E-02	.40531E+00	.21817E+00	-.29591E-01	.37355E-02	.10134E-01	-.89256E+00	.11012E+01	.25293E+00
.99700E+00	.29055E-02	.40380E+00	.21735E+00	-.22466E-01	.27459E-02	.78388E-02	-.88543E+00	.10989E+01	.25173E+00
.99800E+00	.28733E-02	.40229E+00	.21654E+00	-.15338E-01	.17401E-02	.55325E-02	-.87831E+00	.10967E+01	.25054E+00
.99900E+00	.28433E-02	.40078E+00	.21572E+00	-.82065E-02	.71840E-03	.32151E-02	-.87118E+00	.10944E+01	.24934E+00
.10000E+01	.28154E-02	.39927E+00	.21490E+00	-.10720E-02	-.31921E-03	.88650E-03	-.86406E+00	.10921E+01	.24815E+00
THETA= .12217E+01									
.99000E+00	.29761E+00	.30755E+00	.24197E+00	-.92858E-01	.69237E-02	.25681E-01	-.68448E+00	.16233E+01	.17792E+00
.99100E+00	.29747E+00	.30643E+00	.24110E+00	-.83727E-01	.62628E-02	.23284E-01	-.67403E+00	.16230E+01	.17710E+00
.99200E+00	.29733E+00	.30531E+00	.24023E+00	-.74592E-01	.55894E-02	.20835E-01	-.66359E+00	.16228E+01	.17628E+00
.99300E+00	.29719E+00	.30419E+00	.23936E+00	-.65453E-01	.49036E-02	.18394E-01	-.65315E+00	.16226E+01	.17547E+00
.99400E+00	.29705E+00	.30307E+00	.23848E+00	-.56308E-01	.42055E-02	.15940E-01	-.64271E+00	.16224E+01	.17465E+00
.99500E+00	.29692E+00	.30195E+00	.23760E+00	-.47159E-01	.34951E-02	.13474E-01	-.63228E+00	.16222E+01	.17383E+00
.99600E+00	.29679E+00	.30083E+00	.23672E+00	-.38005E-01	.27726E-02	.10996E-01	-.62185E+00	.16220E+01	.17301E+00
.99700E+00	.29666E+00	.29971E+00	.23584E+00	-.28847E-01	.20381E-02	.85056E-02	-.61143E+00	.16218E+01	.17220E+00
.99800E+00	.29653E+00	.29859E+00	.23496E+00	-.19683E-01	.12916E-02	.60031E-02	-.60100E+00	.16216E+01	.17138E+00
.99900E+00	.29641E+00	.29747E+00	.23407E+00	-.10516E-01	.53321E-03	.34885E-02	-.59058E+00	.16215E+01	.17056E+00
.10000E+01	.29629E+00	.29635E+00	.23318E+00	-.13434E-02	-.23692E-03	.96191E-03	-.58016E+00	.16213E+01	.16974E+00
THETA= .13936E+01									
.99000E+00	.48978E+00	.16365E+00	.25359E+00	-.10629E+00	.36340E-02	.26914E-01	-.52076E+00	.19548E+01	.90332E-01
.99100E+00	.48957E+00	.16305E+00	.25268E+00	-.95841E-01	.33324E-02	.24381E-01	-.50815E+00	.19560E+01	.89917E-01
.99200E+00	.48937E+00	.16245E+00	.25176E+00	-.85383E-01	.29741E-02	.21836E-01	-.49554E+00	.19571E+01	.89502E-01
.99300E+00	.48917E+00	.16186E+00	.25085E+00	-.74920E-01	.26091E-02	.19277E-01	-.48294E+00	.19583E+01	.89086E-01
.99400E+00	.48897E+00	.16126E+00	.24993E+00	-.64452E-01	.22377E-02	.16705E-01	-.47034E+00	.19595E+01	.88671E-01

.99500E+00	.48878E+00	.16067E+00	.24901E+00	-.53977E-01	.18557E-02	.11524E-01	-.45775E+00	.19606E+01	-.82556E-01
.99600E+00	.48858E+00	.16007E+00	.24809E+00	-.43497E-01	.14753E-02	.11524E-01	-.44516E+00	.19618E+01	-.87841E-01
.99700E+00	.48839E+00	.15947E+00	.24716E+00	-.33011E-01	.10844E-02	.89140E-02	-.43258E+00	.19631E+01	-.87426E-01
.99800E+00	.48821E+00	.15888E+00	.24624E+00	-.22520E-01	.68723E-03	.62913E-02	-.42000E+00	.19643E+01	-.87011E-01
.99900E+00	.48802E+00	.15828E+00	.24531E+00	-.12023E-01	.28372E-03	.36560E-02	-.40743E+00	.19655E+01	-.86596E-01
.10000E+01	.48784E+00	.15768E+00	.24438E+00	-.15205E-02	-.12606E-03	.10081E-02	-.39486E+00	.19667E+01	-.86181E-01
THETA=	.15708E+01								
.99000E+00	.55652E+00	.25557E-13	.25750E+00	-.11086E+00	.57533E-15	.27329E-01	-.46390E+00	.20700E+01	.13893E-13
.99100E+00	.55629E+00	.25464E-13	.25658E+00	-.10005E+00	.52041E-15	.24757E-01	-.45054E+00	.20716E+01	.13829E-13
.99200E+00	.55607E+00	.25370E-13	.25565E+00	-.89131E-01	.46446E-15	.22172E-01	-.43718E+00	.20732E+01	.13765E-13
.99300E+00	.55584E+00	.25277E-13	.25472E+00	-.78208E-01	.40747E-15	.19574E-01	-.42383E+00	.20749E+01	.13701E-13
.99400E+00	.55563E+00	.25184E-13	.25379E+00	-.67280E-01	.34946E-15	.16963E-01	-.41048E+00	.20765E+01	.13637E-13
.99500E+00	.55541E+00	.25091E-13	.25285E+00	-.56345E-01	.29043E-15	.14339E-01	-.39714E+00	.20782E+01	.13574E-13
.99600E+00	.55519E+00	.24998E-13	.25192E+00	-.45404E-01	.23039E-15	.11702E-01	-.38380E+00	.20799E+01	.13510E-13
.99700E+00	.55498E+00	.24905E-13	.25098E+00	-.34457E-01	.16936E-15	.90515E-02	-.37047E+00	.20816E+01	.13446E-13
.99800E+00	.55477E+00	.24812E-13	.25004E+00	-.23505E-01	.10732E-15	.63884E-02	-.35714E+00	.20833E+01	.13382E-13
.99900E+00	.55457E+00	.24719E-13	.24909E+00	-.12546E-01	.44308E-16	.37124E-02	-.34382E+00	.20850E+01	.13318E-13
.10000E+01	.55436E+00	.24625E-13	.24815E+00	-.15820E-02	-.19687E-16	.10236E-02	-.33051E+00	.20867E+01	.13254E-13
THETA=	.17453E+01								

.99000E+00	.48978E+00	.16365E+00	.25359E+00	-.10629E+00	-.36840E-02	.26914E-01	-.52076E+00	.19548E+01	-.90332E-01
.99100E+00	.48957E+00	.16305E+00	.25268E+00	-.95841E-01	-.33324E-02	.24381E-01	-.50815E+00	.19560E+01	-.89917E-01
.99200E+00	.48937E+00	.16245E+00	.25176E+00	-.85383E-01	-.29741E-02	.21836E-01	-.49554E+00	.19571E+01	-.89502E-01
.99300E+00	.48917E+00	.16186E+00	.25085E+00	-.74920E-01	-.26091E-02	.19277E-01	-.48294E+00	.19583E+01	-.89086E-01
.99400E+00	.48897E+00	.16126E+00	.24993E+00	-.64452E-01	-.22377E-02	.16705E-01	-.47034E+00	.19595E+01	-.88671E-01
.99500E+00	.48878E+00	.16067E+00	.24901E+00	-.53977E-01	-.18597E-02	.14121E-01	-.45775E+00	.19606E+01	-.88256E-01
.99600E+00	.48858E+00	.16007E+00	.24809E+00	-.43497E-01	-.14753E-02	.11524E-01	-.44516E+00	.19618E+01	-.87841E-01
.99700E+00	.48839E+00	.15947E+00	.24716E+00	-.33011E-01	-.10844E-02	.89140E-02	-.43258E+00	.19631E+01	-.87426E-01
.99800E+00	.48821E+00	.15888E+00	.24624E+00	-.22520E-01	-.68723E-03	.62913E-02	-.42000E+00	.19643E+01	-.87011E-01
.99900E+00	.48802E+00	.15828E+00	.24531E+00	-.12023E-01	-.28372E-03	.36560E-02	-.40743E+00	.19655E+01	-.86596E-01
.10000E+01	.48784E+00	.15768E+00	.24438E+00	-.15205E-02	-.12606E-03	.10081E-02	-.39486E+00	.19667E+01	-.86181E-01
THETA=	.19199E+01								
.99000E+00	.29761E+00	.30755E+00	.24197E+00	-.92858E-01	-.69237E-02	.25681E-01	-.68448E+00	.16233E+01	-.17792E+00
.99100E+00	.29747E+00	.30643E+00	.24110E+00	-.83727E-01	-.62628E-02	.23264E-01	-.67403E+00	.16230E+01	-.17710E+00
.99200E+00	.29733E+00	.30531E+00	.24023E+00	-.74592E-01	-.55894E-02	.20835E-01	-.66359E+00	.16228E+01	-.17628E+00
.99300E+00	.29719E+00	.30419E+00	.23936E+00	-.65453E-01	-.49036E-02	.18394E-01	-.65315E+00	.16226E+01	-.17547E+00
.99400E+00	.29705E+00	.30307E+00	.23848E+00	-.56308E-01	-.42055E-02	.15940E-01	-.64271E+00	.16224E+01	-.17465E+00
.99500E+00	.29692E+00	.30195E+00	.23760E+00	-.47159E-01	-.34951E-02	.13474E-01	-.63228E+00	.16222E+01	-.17383E+00
.99600E+00	.29679E+00	.30083E+00	.23672E+00	-.38005E-01	-.27726E-02	.10996E-01	-.62185E+00	.16220E+01	-.17301E+00
.99700E+00	.29666E+00	.30071E+00	.23584E+00	-.28847E-01	-.20381E-02	.85056E-02	-.61143E+00	.16218E+01	-.17220E+00
.99800E+00	.29653E+00	.30059E+00	.23496E+00	-.19683E-01	-.12916E-02	.60031E-02	-.60100E+00	.16216E+01	-.17138E+00
.99900E+00	.29641E+00	.30047E+00	.23407E+00	-.10516E-01	-.53321E-03	.34885E-02	-.59058E+00	.16215E+01	-.17056E+00
.10000E+01	.29629E+00	.30035E+00	.23318E+00	-.13434E-02	-.23692E-03	.96191E-03	-.58016E+00	.16213E+01	-.16974E+00

FEE= .69813E+00

THETA= 0.

R	U8AR	V8AR	W8AR	S1RR	S1RT	S1RF	S1TT	S1FF	S1TF
.99000E+00	-.16568E+01	0.	0.	.43773E-01	0.	0.	-.21535E+01	-.19443E+01	.59155E+00
.99100E+00	-.16563E+01	0.	0.	.39466E-01	0.	0.	-.21660E+01	-.19583E+01	.58883E+00
.99200E+00	-.16558E+01	0.	0.	.35154E-01	0.	0.	-.21784E+01	-.19717E+01	.58611E+00
.99300E+00	-.16553E+01	0.	0.	.30836E-01	0.	0.	-.21909E+01	-.19852E+01	.58339E+00
.99400E+00	-.16548E+01	0.	0.	.26512E-01	0.	0.	-.22034E+01	-.19986E+01	.58067E+00
.99500E+00	-.16543E+01	0.	0.	.22182E-01	0.	0.	-.22158E+01	-.20120E+01	.57796E+00
.99600E+00	-.16538E+01	0.	0.	.17848E-01	0.	0.	-.22282E+01	-.20253E+01	.57524E+00
.99700E+00	-.16533E+01	0.	0.	.13508E-01	0.	0.	-.22406E+01	-.20387E+01	.57252E+00
.99800E+00	-.16528E+01	0.	0.	.91627E-02	0.	0.	-.22530E+01	-.20520E+01	.56980E+00
.99900E+00	-.16523E+01	0.	0.	.48129E-02	0.	0.	-.22653E+01	-.20653E+01	.56708E+00
.10000E+01	-.16518E+01	0.	0.	.45823E-03	0.	0.	-.22777E+01	-.20787E+01	.56437E+00

THETA= .17453E+00

R	U8AR	V8AR	W8AR	S1RR	S1RT	S1RF	S1TT	S1FF	S1TF
.99000E+00	-.15832E+01	.18024E+00	.50847E-01	.40988E-01	.54452E-02	.3966E-02	-.20897E+01	-.18168E+01	.58257E+00
.99100E+00	-.15828E+01	.17958E+00	.50665E-01	.36956E-01	.49278E-02	.48887E-02	-.21014E+01	-.18299E+01	.57989E+00
.99200E+00	-.15823E+01	.17893E+00	.50482E-01	.32919E-01	.44029E-02	.43783E-02	-.21132E+01	-.18429E+01	.57721E+00
.99300E+00	-.15818E+01	.17827E+00	.50298E-01	.28876E-01	.38706E-02	.38652E-02	-.21249E+01	-.18559E+01	.57453E+00
.99400E+00	-.15814E+01	.17762E+00	.50114E-01	.24828E-01	.33308E-02	.33496E-02	-.21366E+01	-.18688E+01	.57185E+00
.99500E+00	-.15809E+01	.17696E+00	.49930E-01	.20775E-01	.27837E-02	.28314E-02	-.21483E+01	-.18818E+01	.56918E+00
.99600E+00	-.15804E+01	.17630E+00	.49745E-01	.16716E-01	.22294E-02	.23107E-02	-.21603E+01	-.18947E+01	.56650E+00
.99700E+00	-.15799E+01	.17565E+00	.49559E-01	.12653E-01	.16677E-02	.17874E-02	-.21717E+01	-.19077E+01	.56382E+00
.99800E+00	-.15795E+01	.17499E+00	.49374E-01	.85848E-02	.10989E-02	.12615E-02	-.21833E+01	-.19206E+01	.56114E+00
.99900E+00	-.15790E+01	.17433E+00	.49187E-01	.45119E-02	.52296E-03	.73308E-03	-.21950E+01	-.19335E+01	.55847E+00
.10000E+01	-.15785E+01	.17367E+00	.49001E-01	.43438E-03	-.50097E-04	.20213E-03	-.22066E+01	-.19463E+01	.55579E+00

THETA= .34907E+00

R	U8AR	V8AR	W8AR	S1RR	S1RT	S1RF	S1TT	S1FF	S1TF
.99000E+00	-.13714E+01	.33874E+00	.10015E+00	.32969E-01	.10234E-01	.10629E-01	-.19059E+01	-.14483E+01	.55588E+00
.99100E+00	-.13710E+01	.33751E+00	.99790E-01	.29730E-01	.96213E-02	.96289E-02	-.19156E+01	-.14600E+01	.55332E+00
.99200E+00	-.13706E+01	.33628E+00	.99429E-01	.26485E-01	.82748E-02	.86235E-02	-.19252E+01	-.14718E+01	.55077E+00
.99300E+00	-.13702E+01	.33504E+00	.99068E-01	.23235E-01	.72743E-02	.76130E-02	-.19349E+01	-.14835E+01	.54821E+00
.99400E+00	-.13698E+01	.33381E+00	.98705E-01	.19981E-01	.62599E-02	.65975E-02	-.19445E+01	-.14953E+01	.54566E+00
.99500E+00	-.13694E+01	.33258E+00	.98342E-01	.16723E-01	.52317E-02	.55768E-02	-.19541E+01	-.15070E+01	.54310E+00
.99600E+00	-.13690E+01	.33134E+00	.97979E-01	.13460E-01	.41998E-02	.45511E-02	-.19637E+01	-.15187E+01	.54055E+00
.99700E+00	-.13686E+01	.33011E+00	.97613E-01	.10192E-01	.31343E-02	.35204E-02	-.19733E+01	-.15304E+01	.53799E+00
.99800E+00	-.13682E+01	.32887E+00	.97247E-01	.69208E-02	.20653E-02	.24846E-02	-.19828E+01	-.15420E+01	.53544E+00
.99900E+00	-.13678E+01	.32764E+00	.96880E-01	.36452E-02	.98284E-03	.14439E-02	-.19924E+01	-.15537E+01	.53288E+00
.10000E+01	-.13674E+01	.32640E+00	.96512E-01	.36570E-03	-.11295E-03	.39813E-03	-.20019E+01	-.15653E+01	.53033E+00

THETA= .52360E+00

R	U8AR	V8AR	W8AR	S1RR	S1RT	S1RF	S1TT	S1FF	S1TF
.99000E+00	-.10470E+01	.45638E+00	.14641E+00	.20844E-01	.13788E-01	.15539E-01	-.16245E+01	-.88355E+00	.51230E+00
.99100E+00	-.10467E+01	.45473E+00	.14588E+00	.18637E-01	.12478E-01	.14077E-01	-.16309E+01	-.89341E+00	.50994E+00
.99200E+00	-.10464E+01	.45307E+00	.14536E+00	.16627E-01	.11149E-01	.12607E-01	-.16373E+01	-.90326E+00	.50759E+00
.99300E+00	-.10461E+01	.45140E+00	.14483E+00	.14593E-01	.98006E-02	.11130E-01	-.16437E+01	-.91310E+00	.50523E+00
.99400E+00	-.10458E+01	.44974E+00	.14430E+00	.12555E-01	.84340E-02	.96449E-02	-.16501E+01	-.92292E+00	.50288E+00
.99500E+00	-.10455E+01	.44808E+00	.14377E+00	.10514E-01	.70487E-02	.81528E-02	-.16565E+01	-.93273E+00	.50052E+00
.99600E+00	-.10452E+01	.44642E+00	.14323E+00	.84700E-02	.56450E-02	.66533E-02	-.16629E+01	-.94252E+00	.49817E+00
.99700E+00	-.10449E+01	.44476E+00	.14270E+00	.64223E-02	.42229E-02	.51465E-02	-.16693E+01	-.95230E+00	.49582E+00
.99800E+00	-.10446E+01	.44309E+00	.14217E+00	.43715E-02	.27826E-02	.36323E-02	-.16757E+01	-.96207E+00	.49346E+00
.99900E+00	-.10442E+01	.44143E+00	.14163E+00	.23175E-02	.13242E-02	.21108E-02	-.16820E+01	-.97182E+00	.49111E+00
.10000E+01	-.10439E+01	.43976E+00	.14109E+00	.26048E-03	-.15217E-03	.58202E-03	-.16884E+01	-.98157E+00	.48876E+00

THETA= .59813E+00

R	U8AR	V8AR	W8AR	S1RR	S1RT	S1RF	S1TT	S1FF	S1TF
.99000E+00	-.64894E+00	.51898E+00	.18822E+00	.56135E-02	.15679E-01	.19976E-01	-.12792E+01	-.19083E+00	.45316E+00



.99100E+00 - .64877E+00 .51709E+00 .18754E+00 .50751E-02 .14189E-01 .13096E-01 - .12817E+01 - .19835E+00 .45107E+00  
 .99200E+00 - .64860E+00 .51521E+00 .18687E+00 .45344E-02 .12678E-01 .16207E-01 - .12841E+01 - .20586E+00 .44899E+00  
 .99300E+00 - .64842E+00 .51332E+00 .18619E+00 .39914E-02 .11145E-01 .14308E-01 - .12866E+01 - .21335E+00 .44691E+00  
 .99400E+00 - .64825E+00 .51143E+00 .18551E+00 .34462E-02 .95908E-02 .12399E-01 - .12891E+01 - .22083E+00 .44482E+00  
 .99500E+00 - .64807E+00 .50954E+00 .18482E+00 .28988E-02 .80155E-02 .10481E-01 - .12945E+01 - .22831E+00 .44274E+00  
 .99600E+00 - .64789E+00 .50765E+00 .18414E+00 .23493E-02 .64192E-02 .85533E-02 - .12945E+01 - .23577E+00 .44066E+00  
 .99700E+00 - .64772E+00 .50576E+00 .18345E+00 .17977E-02 .48021E-02 .66162E-02 - .12964E+01 - .24322E+00 .43858E+00  
 .99800E+00 - .64754E+00 .50386E+00 .18276E+00 .12442E-02 .31642E-02 .46696E-02 - .12989E+01 - .25065E+00 .43649E+00  
 .99900E+00 - .64736E+00 .50197E+00 .18207E+00 .68873E-03 .15058E-02 .7136E-02 - .13013E+01 - .25808E+00 .43441E+00  
 .10000E+01 - .64718E+00 .50008E+00 .18138E+00 .13141E-03 - .17304E-03 .74823E-03 - .13037E+01 - .26549E+00 .43233E+00  
 THETA= .87266E+00

.99000E+00 - .22537E+00 .51898E+00 .22431E+00 - .10424E-01 .15679E-01 .23807E-01 - .91176E+00 .54634E+00 .38024E+00  
 .99100E+00 - .22533E+00 .51709E+00 .22351E+00 - .93787E-02 .14189E-01 .21566E-01 - .91003E+00 .54132E+00 .37849E+00  
 .99200E+00 - .22529E+00 .51521E+00 .22270E+00 - .83342E-02 .12678E-01 .19315E-01 - .90829E+00 .53630E+00 .37675E+00  
 .99300E+00 - .22525E+00 .51332E+00 .22189E+00 - .72906E-02 .11145E-01 .17051E-01 - .90656E+00 .53130E+00 .37500E+00  
 .99400E+00 - .22521E+00 .51143E+00 .22108E+00 - .62477E-02 .95908E-02 .14777E-01 - .90482E+00 .52631E+00 .37325E+00  
 .99500E+00 - .22517E+00 .50954E+00 .22026E+00 - .52056E-02 .80155E-02 .12491E-01 - .90309E+00 .52132E+00 .37150E+00  
 .99600E+00 - .22513E+00 .50765E+00 .21945E+00 - .41643E-02 .64192E-02 .10193E-01 - .90136E+00 .51635E+00 .36976E+00  
 .99700E+00 - .22508E+00 .50576E+00 .21863E+00 - .31237E-02 .48021E-02 .78849E-02 - .89962E+00 .51138E+00 .36801E+00  
 .99800E+00 - .22504E+00 .50386E+00 .21781E+00 - .20838E-02 .31642E-02 .55650E-02 - .89789E+00 .50642E+00 .36626E+00  
 .99900E+00 - .22499E+00 .50197E+00 .21699E+00 - .10445E-02 .15058E-02 .32340E-02 - .89616E+00 .50147E+00 .36451E+00  
 .10000E+01 - .22495E+00 .50008E+00 .21616E+00 - .59470E-05 - .17304E-03 .89171E-03 - .89443E+00 .49653E+00 .36277E+00  
 THETA= .10472E+01

.99000E+00 - .17266E+00 .45638E+00 .25359E+00 - .25494E-01 .13788E-01 .26914E-01 - .56649E+00 .12391E+01 .29578E+00  
 .99100E+00 - .17257E+00 .45473E+00 .25268E+00 - .20427E-01 .12478E-01 .26438E-01 - .56080E+00 .12364E+01 .29442E+00  
 .99200E+00 - .17249E+00 .45307E+00 .25176E+00 - .22427E-01 .11149E-01 .21836E-01 - .55511E+00 .12337E+01 .29306E+00  
 .99300E+00 - .17240E+00 .45140E+00 .25085E+00 - .17892E-01 .98006E-02 .19277E-01 - .54942E+00 .12310E+01 .29170E+00  
 .99400E+00 - .17231E+00 .44974E+00 .24993E+00 - .15357E-01 .84340E-02 .16705E-01 - .54375E+00 .12284E+01 .29034E+00  
 .99500E+00 - .17223E+00 .44808E+00 .24901E+00 - .12821E-01 .70487E-02 .14121E-01 - .53807E+00 .12257E+01 .28898E+00  
 .99600E+00 - .17215E+00 .44642E+00 .24809E+00 - .10285E-01 .56450E-02 .11524E-01 - .53241E+00 .12231E+01 .28762E+00  
 .99700E+00 - .17206E+00 .44476E+00 .24716E+00 - .77483E-02 .42229E-02 .89140E-02 - .52675E+00 .12205E+01 .28626E+00  
 .99800E+00 - .17198E+00 .44309E+00 .24624E+00 - .52111E-02 .27826E-02 .62913E-02 - .52109E+00 .12178E+01 .28490E+00  
 .99900E+00 - .17190E+00 .44143E+00 .24531E+00 - .26733E-02 .13242E-02 .36560E-02 - .51544E+00 .12152E+01 .28354E+00  
 .10000E+01 - .17182E+00 .43976E+00 .24438E+00 - .13502E-03 - .15217E-03 .10081E-02 - .50979E+00 .12126E+01 .28218E+00  
 THETA= .12217E+01

.99000E+00 - .49713E+00 .33874E+00 .27516E+00 - .37780E-01 .10234E-01 .29203E-01 - .28502E+00 .18038E+01 .20232E+00  
 .99100E+00 - .49695E+00 .33751E+00 .27417E+00 - .34033E-01 .92613E-02 .26455E-01 - .27610E+00 .18030E+01 .20139E+00  
 .99200E+00 - .49676E+00 .33628E+00 .27318E+00 - .30285E-01 .82748E-02 .23693E-01 - .26719E+00 .18022E+01 .20046E+00  
 .99300E+00 - .49657E+00 .33504E+00 .27219E+00 - .26535E-01 .72743E-02 .20917E-01 - .25829E+00 .18015E+01 .19953E+00  
 .99400E+00 - .49638E+00 .33381E+00 .27119E+00 - .22783E-01 .62599E-02 .18126E-01 - .24939E+00 .18007E+01 .19860E+00  
 .99500E+00 - .49619E+00 .33258E+00 .27019E+00 - .19030E-01 .52317E-02 .15322E-01 - .24051E+00 .18000E+01 .19767E+00  
 .99600E+00 - .49601E+00 .33134E+00 .26919E+00 - .15275E-01 .41898E-02 .12504E-01 - .23164E+00 .17993E+01 .19674E+00  
 .99700E+00 - .49582E+00 .33011E+00 .26819E+00 - .11518E-01 .31343E-02 .96722E-02 - .22277E+00 .17985E+01 .19581E+00  
 .99800E+00 - .49563E+00 .32887E+00 .26718E+00 - .77604E-02 .20653E-02 .68265E-02 - .21392E+00 .17978E+01 .19488E+00  
 .99900E+00 - .49545E+00 .32764E+00 .26618E+00 - .40010E-02 .98284E-03 .39670E-02 - .20507E+00 .17971E+01 .19395E+00  
 .10000E+01 - .49526E+00 .32640E+00 .26517E+00 - .24024E-03 - .11295E-03 .10938E-02 - .19624E+00 .17964E+01 .19302E+00  
 THETA= .13963E+01

.99000E+00 - .70892E+00 .18024E+00 .28837E+00 - .45798E-01 .54452E-02 .30605E-01 - .10131E+00 .21723E+01 .10225E+00  
 .99100E+00 - .70866E+00 .17958E+00 .28733E+00 - .41260E-01 .49278E-02 .27225E-01 - .90279E-01 .21728E+01 .10225E+00  
 .99200E+00 - .70841E+00 .17893E+00 .28630E+00 - .36719E-01 .44029E-02 .24830E-01 - .79263E-01 .21733E+01 .10178E+00  
 .99300E+00 - .70815E+00 .17827E+00 .28525E+00 - .32176E-01 .38706E-02 .21921E-01 - .68261E-01 .21738E+01 .10131E+00  
 .99400E+00 - .70790E+00 .17762E+00 .28421E+00 - .27630E-01 .33308E-02 .18997E-01 - .57270E-01 .21743E+01 .10083E+00  
 THETA= .13963E+01

.99500E+00	.70764E+00	.17696E+00	.28316E+00	-.23082E-01	.27837E-02	.16058E-01	-.46292E-01	.21748E+01	.10036E+00
.99600E+00	.70739E+00	.17630E+00	.28212E+00	-.18332E-01	.22294E-02	.13104E-01	-.35325E-01	.21753E+01	.99889E-01
.99700E+00	.70714E+00	.17565E+00	.28107E+00	-.13979E-01	.16677E-02	.10137E-01	-.24371E-01	.21758E+01	.99417E-01
.99800E+00	.70688E+00	.17499E+00	.28001E+00	-.94244E-02	.10989E-02	.71543E-02	-.13428E-01	.21763E+01	.98945E-01
.99900E+00	.70663E+00	.17433E+00	.27895E+00	-.48677E-02	.52296E-03	.41575E-02	-.24967E-02	.21768E+01	.98473E-01
.10000E+01	.70638E+00	.17367E+00	.27790E+00	-.30892E-03	-.60097E-04	.11464E-02	.84232E-02	.21774E+01	.98001E-01
THETA= .15708E+01									
.99000E+00	.78247E+00	.28148E-13	.29282E+00	-.48583E-01	.85037E-15	.31078E-01	-.37502E-01	.23004E+01	.15798E-13
.99100E+00	.78219E+00	.28046E-13	.29177E+00	-.43770E-01	.76957E-15	.28153E-01	-.25743E-01	.23013E+01	.15726E-13
.99200E+00	.78191E+00	.27943E-13	.29071E+00	-.38954E-01	.68760E-15	.25214E-01	-.13997E-01	.23022E+01	.15653E-13
.99300E+00	.78164E+00	.27841E-13	.28966E+00	-.34135E-01	.60447E-15	.22259E-01	-.22652E-02	.23031E+01	.15580E-13
.99400E+00	.78136E+00	.27738E-13	.28860E+00	-.29313E-01	.52018E-15	.19290E-01	.94540E-02	.23040E+01	.15508E-13
.99500E+00	.78108E+00	.27636E-13	.28753E+00	-.24489E-01	.43474E-15	.16306E-01	.21160E-01	.23050E+01	.15435E-13
.99600E+00	.78080E+00	.27533E-13	.28647E+00	-.19663E-01	.34816E-15	.13307E-01	.32853E-01	.23059E+01	.15363E-13
.99700E+00	.78052E+00	.27431E-13	.28540E+00	-.14834E-01	.26045E-15	.10293E-01	.44534E-01	.23069E+01	.15290E-13
.99800E+00	.78025E+00	.27328E-13	.28433E+00	-.10002E-01	.17162E-15	.72646E-02	.56202E-01	.23078E+01	.15217E-13
.99900E+00	.77997E+00	.27225E-13	.28326E+00	-.51687E-02	.81670E-16	.42216E-02	.67858E-01	.23087E+01	.15145E-13
.10000E+01	.77970E+00	.27123E-13	.28218E+00	-.33277E-03	-.93854E-17	.11640E-02	.79501E-01	.23097E+01	.15072E-13
THETA= .17453E+01									
.99000E+00	.70892E+00	.18024E+00	.28837E+00	-.45798E-01	-.54452E-02	.30605E-01	-.10131E+00	.21723E+01	-.10272E+00
.99100E+00	.70866E+00	.17958E+00	.28733E+00	-.41260E-01	-.49278E-02	.2725E-01	-.90279E-01	.21728E+01	-.10225E+00
.99200E+00	.70841E+00	.17893E+00	.28630E+00	-.36719E-01	-.44029E-02	.24830E-01	-.79263E-01	.21733E+01	-.10178E+00
.99300E+00	.70815E+00	.17827E+00	.28525E+00	-.32176E-01	-.38706E-02	.21921E-01	-.68261E-01	.21738E+01	-.10131E+00
.99400E+00	.70790E+00	.17762E+00	.28421E+00	-.27630E-01	-.33308E-02	.18997E-01	-.57270E-01	.21743E+01	-.10083E+00
.99500E+00	.70764E+00	.17696E+00	.28316E+00	-.23082E-01	-.27837E-02	.16058E-01	-.46292E-01	.21748E+01	-.10036E+00
.99600E+00	.70739E+00	.17630E+00	.28212E+00	-.18332E-01	-.22294E-02	.13104E-01	-.35325E-01	.21753E+01	-.99889E-01
.99700E+00	.70714E+00	.17565E+00	.28107E+00	-.13979E-01	-.16677E-02	.10137E-01	-.24371E-01	.21758E+01	-.99417E-01
.99800E+00	.70688E+00	.17499E+00	.28001E+00	-.94244E-02	-.10989E-02	.71543E-02	-.13428E-01	.21763E+01	-.98945E-01
.99900E+00	.70663E+00	.17433E+00	.27895E+00	-.48677E-02	-.52296E-03	.41575E-02	-.24967E-02	.21768E+01	-.98473E-01
.10000E+01	.70638E+00	.17367E+00	.27790E+00	-.30892E-03	.60097E-04	.11464E-02	.84232E-02	.21774E+01	-.98001E-01
THETA= .19199E+01									
.99000E+00	.49713E+00	.33874E+00	.27516E+00	-.37780E-01	-.10234E-01	.29203E-01	-.26502E+00	.18038E+01	-.20232E+00
.99100E+00	.49695E+00	.33751E+00	.27417E+00	-.34033E-01	-.92613E-02	.26455E-01	-.27610E+00	.18030E+01	-.20139E+00
.99200E+00	.49676E+00	.33628E+00	.27318E+00	-.30285E-01	-.82748E-02	.23693E-01	-.26719E+00	.18022E+01	-.20046E+00
.99300E+00	.49657E+00	.33504E+00	.27219E+00	-.26535E-01	-.72743E-02	.20917E-01	-.25829E+00	.18015E+01	-.19953E+00
.99400E+00	.49638E+00	.33381E+00	.27119E+00	-.22783E-01	-.62599E-02	.18126E-01	-.24939E+00	.18007E+01	-.19860E+00
.99500E+00	.49619E+00	.33258E+00	.27019E+00	-.19030E-01	-.52317E-02	.15322E-01	-.24051E+00	.18000E+01	-.19767E+00
.99600E+00	.49601E+00	.33134E+00	.26919E+00	-.15275E-01	-.41898E-02	.12504E-01	-.23164E+00	.17993E+01	-.19674E+00
.99700E+00	.49582E+00	.33011E+00	.26819E+00	-.11518E-01	-.31343E-02	.96722E-02	-.22277E+00	.17985E+01	-.19581E+00
.99800E+00	.49563E+00	.32887E+00	.26719E+00	-.77604E-02	-.20653E-02	.68265E-02	-.21392E+00	.17978E+01	-.19488E+00
.99900E+00	.49545E+00	.32764E+00	.26618E+00	-.40010E-02	-.98284E-03	.39670E-02	-.20507E+00	.17971E+01	-.19395E+00
.10000E+01	.49526E+00	.32640E+00	.26517E+00	-.24024E-03	.11295E-03	.10338E-02	-.19624E+00	.17964E+01	-.19302E+00



FEE= .87266E+00

THETA= 0.

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.16568E+01	0.	0.	.43773E-01	0.	0.	-.19448E+01	-.21535E+01	.59155E+00
.99100E+00	-.16563E+01	0.	0.	.37466E-01	0.	0.	-.19583E+01	-.21660E+01	.58883E+00
.99200E+00	-.16558E+01	0.	0.	.35154E-01	0.	0.	-.19717E+01	-.21784E+01	.58611E+00
.99300E+00	-.16553E+01	0.	0.	.30836E-01	0.	0.	-.19852E+01	-.21909E+01	.58339E+00
.99400E+00	-.16548E+01	0.	0.	.26512E-01	0.	0.	-.19986E+01	-.22034E+01	.58067E+00
.99500E+00	-.16543E+01	0.	0.	.22182E-01	0.	0.	-.20120E+01	-.22158E+01	.57796E+00
.99600E+00	-.16538E+01	0.	0.	.17848E-01	0.	0.	-.20253E+01	-.22282E+01	.57524E+00
.99700E+00	-.16533E+01	0.	0.	.13508E-01	0.	0.	-.20387E+01	-.22406E+01	.57252E+00
.99800E+00	-.16528E+01	0.	0.	.91627E-02	0.	0.	-.20520E+01	-.22530E+01	.56980E+00
.99900E+00	-.16523E+01	0.	0.	.48129E-02	0.	0.	-.20653E+01	-.22653E+01	.56708E+00
.10000E+01	-.16518E+01	0.	0.	.45823E-03	0.	0.	-.20787E+01	-.22777E+01	.56437E+00

THETA= .17453E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.15760E+01	.19790E+00	.50847E-01	.42990E-01	.73194E-02	.53966E-02	-.18736E+01	-.20118E+01	.58257E+00
.99100E+00	-.15755E+01	.19718E+00	.50665E-01	.38762E-01	.66256E-02	.48887E-02	-.18864E+01	-.20239E+01	.57989E+00
.99200E+00	-.15750E+01	.19646E+00	.50482E-01	.34529E-01	.59235E-02	.43783E-02	-.18991E+01	-.20360E+01	.57721E+00
.99300E+00	-.15746E+01	.19574E+00	.50298E-01	.30291E-01	.52130E-02	.38652E-02	-.19118E+01	-.20481E+01	.57453E+00
.99400E+00	-.15741E+01	.19502E+00	.50114E-01	.26047E-01	.44941E-02	.33496E-02	-.19245E+01	-.20601E+01	.57195E+00
.99500E+00	-.15736E+01	.19430E+00	.49930E-01	.21797E-01	.37671E-02	.28314E-02	-.19372E+01	-.20722E+01	.56918E+00
.99600E+00	-.15732E+01	.19358E+00	.49745E-01	.17543E-01	.30319E-02	.23107E-02	-.19499E+01	-.20842E+01	.56650E+00
.99700E+00	-.15727E+01	.19286E+00	.49559E-01	.13283E-01	.22885E-02	.17874E-02	-.19626E+01	-.20962E+01	.56382E+00
.99800E+00	-.15722E+01	.19214E+00	.49374E-01	.90181E-02	.15370E-02	.12615E-02	-.19752E+01	-.21082E+01	.56114E+00
.99900E+00	-.15717E+01	.19142E+00	.49187E-01	.47486E-02	.77755E-03	.73308E-03	-.19878E+01	-.21202E+01	.55847E+00
.10000E+01	-.15713E+01	.19069E+00	.49001E-01	.47447E-03	.10103E-04	.20213E-03	-.20004E+01	-.21322E+01	.55579E+00

THETA= .34907E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.13433E+01	.37193E+00	.10015E+00	.40734E-01	.13756E-01	.10629E-01	-.16686E+01	-.16038E+01	.55588E+00
.99100E+00	-.13429E+01	.37058E+00	.99790E-01	.36735E-01	.12452E-01	.96289E-02	-.16794E+01	-.16148E+01	.55332E+00
.99200E+00	-.13425E+01	.36923E+00	.99429E-01	.32731E-01	.11133E-01	.86235E-02	-.16901E+01	-.16258E+01	.55077E+00
.99300E+00	-.13421E+01	.36787E+00	.99068E-01	.28722E-01	.97972E-02	.76130E-02	-.17007E+01	-.16368E+01	.54821E+00
.99400E+00	-.13417E+01	.36652E+00	.98703E-01	.24708E-01	.84462E-02	.65975E-02	-.17114E+01	-.16478E+01	.54566E+00
.99500E+00	-.13413E+01	.36517E+00	.98342E-01	.20688E-01	.70798E-02	.55768E-02	-.17221E+01	-.16587E+01	.54310E+00
.99600E+00	-.13409E+01	.36381E+00	.97978E-01	.16664E-01	.56980E-02	.45511E-02	-.17327E+01	-.16697E+01	.54055E+00
.99700E+00	-.13405E+01	.36246E+00	.97613E-01	.12635E-01	.43009E-02	.35204E-02	-.17433E+01	-.16806E+01	.53799E+00
.99800E+00	-.13401E+01	.36110E+00	.97247E-01	.86017E-02	.28887E-02	.24846E-02	-.17540E+01	-.16915E+01	.53544E+00
.99900E+00	-.13397E+01	.35974E+00	.96880E-01	.45636E-02	.14613E-02	.14439E-02	-.17646E+01	-.17024E+01	.53288E+00
.10000E+01	-.13393E+01	.35838E+00	.96512E-01	.52122E-03	.18988E-04	.39813E-03	-.17752E+01	-.17133E+01	.53033E+00

THETA= .52360E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.98686E+00	.50110E+00	.14641E+00	.37213E-01	.18533E-01	.15539E-01	-.13546E+01	-.97872E+00	.51230E+00
.99100E+00	-.98657E+00	.49928E+00	.14588E+00	.33630E-01	.16777E-01	.14077E-01	-.13621E+01	-.98805E+00	.50994E+00
.99200E+00	-.98629E+00	.49746E+00	.14536E+00	.29976E-01	.14999E-01	.12607E-01	-.13697E+01	-.99737E+00	.50759E+00
.99300E+00	-.98600E+00	.49564E+00	.14483E+00	.26319E-01	.13200E-01	.11130E-01	-.13773E+01	-.10067E+01	.50523E+00
.99400E+00	-.98572E+00	.49381E+00	.14430E+00	.22656E-01	.11380E-01	.96449E-02	-.13848E+01	-.10160E+01	.50288E+00
.99500E+00	-.98543E+00	.49199E+00	.14377E+00	.18989E-01	.95386E-02	.81528E-02	-.13924E+01	-.10253E+01	.50052E+00
.99600E+00	-.98514E+00	.49016E+00	.14323E+00	.15318E-01	.76769E-02	.66533E-02	-.13999E+01	-.10345E+01	.49817E+00
.99700E+00	-.98486E+00	.48834E+00	.14270E+00	.11643E-01	.57946E-02	.51465E-02	-.14075E+01	-.10438E+01	.49582E+00
.99800E+00	-.98457E+00	.48651E+00	.14217E+00	.79637E-02	.38919E-02	.36323E-02	-.14150E+01	-.10530E+01	.49346E+00
.99900E+00	-.98428E+00	.48468E+00	.14163E+00	.42803E-02	.19688E-02	.21108E-02	-.14225E+01	-.10623E+01	.49111E+00
.10000E+01	-.98399E+00	.48285E+00	.14109E+00	.59284E-03	.25582E-04	.58202E-03	-.14300E+01	-.10715E+01	.48876E+00

THETA= .69813E+00

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.54959E+00	.56983E+00	.18822E+00	.33039E-01	.21075E-01	.19976E-01	-.96929E+00	-.21196E+00	.45316E+00

.99100E+00 - .54944E+00 .56776E+00 .18754E+00 .29820E-01 .19078E-01 .18096E-01 -.97304E+00 -.21923E+00 .45107E+00  
 .99200E+00 - .54929E+00 .56569E+00 .18687E+00 .26597E-01 .17056E-01 .16207E-01 -.97678E+00 -.22648E+00 .44399E+00  
 .99300E+00 - .54914E+00 .56362E+00 .18619E+00 .23370E-01 .15010E-01 .14308E-01 -.98052E+00 -.23373E+00 .44691E+00  
 .99400E+00 - .54899E+00 .56154E+00 .18551E+00 .20140E-01 .12940E-01 .12399E-01 -.98426E+00 -.24097E+00 .44482E+00  
 .99500E+00 - .54885E+00 .55947E+00 .18482E+00 .16906E-01 .10847E-01 .10481E-01 -.98800E+00 -.24820E+00 .44274E+00  
 .99600E+00 - .54870E+00 .55739E+00 .18414E+00 .13668E-01 .87299E-02 .85533E-02 -.99174E+00 -.25543E+00 .44066E+00  
 .99700E+00 - .54855E+00 .55532E+00 .18345E+00 .10426E-01 .65894E-02 .66162E-02 -.99548E+00 -.26264E+00 .43858E+00  
 .99800E+00 - .54840E+00 .55324E+00 .18276E+00 .71811E-02 .44257E-02 .46696E-02 -.99921E+00 -.26985E+00 .43649E+00  
 .99900E+00 - .54825E+00 .55116E+00 .18207E+00 .39326E-02 .22389E-02 .27136E-02 -.10029E+01 -.27705E+00 .43441E+00  
 .10000E+01 - .54810E+00 .54908E+00 .18138E+00 .68071E-03 .29091E-04 .74823E-03 -.10067E+01 -.28424E+00 .43233E+00  
 THETA= .87266E+00

.99000E+00 - .84263E-01 .56983E+00 .22431E+00 .28528E-01 .21075E-01 .23807E-01 -.55929E+00 .60401E+00 .38024E+00  
 .99100E+00 - .84257E-01 .56776E+00 .22351E+00 .25766E-01 .19078E-01 .21566E-01 -.55895E+00 .59894E+00 .37849E+00  
 .99200E+00 - .84252E-01 .56569E+00 .22270E+00 .23001E-01 .17056E-01 .19315E-01 -.55862E+00 .59388E+00 .37675E+00  
 .99300E+00 - .84248E-01 .56362E+00 .22189E+00 .20233E-01 .15010E-01 .17051E-01 -.55829E+00 .58882E+00 .37500E+00  
 .99400E+00 - .84244E-01 .56154E+00 .22108E+00 .17462E-01 .12940E-01 .14777E-01 -.55797E+00 .58377E+00 .37325E+00  
 .99500E+00 - .84240E-01 .55947E+00 .22026E+00 .14688E-01 .10847E-01 .12491E-01 -.55766E+00 .57872E+00 .37150E+00  
 .99600E+00 - .84237E-01 .55739E+00 .21945E+00 .11911E-01 .87299E-02 .10193E-01 -.55735E+00 .57368E+00 .36976E+00  
 .99700E+00 - .84233E-01 .55532E+00 .21863E+00 .91311E-02 .65894E-02 .78849E-02 -.55704E+00 .56864E+00 .36801E+00  
 .99800E+00 - .84233E-01 .55324E+00 .21781E+00 .63483E-02 .44257E-02 .55650E-02 -.55674E+00 .56361E+00 .36626E+00  
 .99900E+00 - .84231E-01 .55116E+00 .21699E+00 .35627E-02 .22389E-02 .32340E-02 -.55644E+00 .55858E+00 .36451E+00  
 .10000E+01 - .84231E-01 .54908E+00 .21616E+00 .77421E-03 .29091E-04 .89171E-03 -.55615E+00 .55355E+00 .36277E+00  
 THETA= .10472E+01

.99000E+00 .35300E+00 .50110E+00 .25359E+00 .24289E-01 .18533E-01 .26914E-01 -.17401E+00 .13708E+01 .29578E+00  
 .99100E+00 .35287E+00 .49928E+00 .25268E+00 .21956E-01 .16777E-01 .24381E-01 -.16984E+00 .13678E+01 .29442E+00  
 .99200E+00 .35274E+00 .49746E+00 .25176E+00 .19621E-01 .14999E-01 .21836E-01 -.16568E+00 .13648E+01 .29306E+00  
 .99300E+00 .35261E+00 .49564E+00 .25085E+00 .17285E-01 .13200E-01 .19277E-01 -.16153E+00 .13618E+01 .29170E+00  
 .99400E+00 .35248E+00 .49381E+00 .24993E+00 .14945E-01 .11380E-01 .16705E-01 -.15739E+00 .13588E+01 .29034E+00  
 .99500E+00 .35235E+00 .49199E+00 .24901E+00 .12604E-01 .95386E-02 .14121E-01 -.15326E+00 .13558E+01 .28898E+00  
 .99600E+00 .35221E+00 .49016E+00 .24809E+00 .10260E-01 .76796E-02 .11524E-01 -.14915E+00 .13528E+01 .28762E+00  
 .99700E+00 .35208E+00 .48834E+00 .24716E+00 .79141E-02 .57946E-02 .89140E-02 -.14504E+00 .13498E+01 .28626E+00  
 .99800E+00 .35194E+00 .48651E+00 .24624E+00 .55658E-02 .38919E-02 .62913E-02 -.14095E+00 .13468E+01 .28490E+00  
 .99900E+00 .35180E+00 .48468E+00 .24531E+00 .32151E-02 .19688E-02 .36560E-02 -.13687E+00 .13438E+01 .28354E+00  
 .10000E+01 .35166E+00 .48285E+00 .24438E+00 .86207E-03 .25582E-04 .10081E-02 -.13279E+00 .13408E+01 .28218E+00  
 THETA= .12217E+01

.99000E+00 .70946E+00 .37193E+00 .27516E+00 .20833E-01 .13756E-01 .29203E-01 .14007E+00 .19958E+01 .20232E+00  
 .99100E+00 .70922E+00 .37058E+00 .27417E+00 .18851E-01 .12452E-01 .26455E-01 .14737E+00 .19945E+01 .20139E+00  
 .99200E+00 .70898E+00 .36923E+00 .27318E+00 .16867E-01 .11133E-01 .23693E-01 .15465E+00 .19932E+01 .20046E+00  
 .99300E+00 .70874E+00 .36787E+00 .27219E+00 .14881E-01 .97972E-02 .20917E-01 .16192E+00 .19919E+01 .19953E+00  
 .99400E+00 .70850E+00 .36652E+00 .27119E+00 .12894E-01 .84462E-02 .18126E-01 .16917E+00 .19906E+01 .19860E+00  
 .99500E+00 .70825E+00 .36517E+00 .27019E+00 .10905E-01 .70798E-02 .15322E-01 .17640E+00 .19892E+01 .19767E+00  
 .99600E+00 .70801E+00 .36381E+00 .26919E+00 .89144E-02 .56980E-02 .12504E-01 .18362E+00 .19879E+01 .19674E+00  
 .99700E+00 .70776E+00 .36246E+00 .26819E+00 .69220E-02 .43009E-02 .96722E-02 .19082E+00 .19866E+01 .19581E+00  
 .99800E+00 .70751E+00 .36110E+00 .26718E+00 .49278E-02 .28887E-02 .68265E-02 .19801E+00 .19853E+01 .19488E+00  
 .99900E+00 .70726E+00 .35974E+00 .26618E+00 .29317E-02 .14613E-02 .39670E-02 .20517E+00 .19839E+01 .19395E+00  
 .10000E+01 .70701E+00 .35838E+00 .26517E+00 .93369E-03 .18988E-04 .10938E-02 .21233E+00 .19826E+01 .19302E+00  
 THETA= .13963E+01

.99000E+00 .94213E+00 .19790E+00 .28837E+00 .18577E-01 .73194E-02 .30605E-01 .34507E+00 .24038E+01 .10272E+00  
 .99100E+00 .94182E+00 .19718E+00 .28733E+00 .16824E-01 .66256E-02 .27725E-01 .35441E+00 .24036E+01 .10225E+00  
 .99200E+00 .94150E+00 .19646E+00 .28630E+00 .15069E-01 .59235E-02 .24830E-01 .36373E+00 .24034E+01 .10178E+00  
 .99300E+00 .94119E+00 .19574E+00 .28525E+00 .13312E-01 .52130E-02 .21921E-01 .37303E+00 .24032E+01 .10131E+00  
 .99400E+00 .94087E+00 .19502E+00 .28421E+00 .11555E-01 .44941E-02 .18997E-01 .38231E+00 .24029E+01 .10083E+00  
 THETA= .13963E+01

.99500E+00	.94056E+00	.19430E+00	.28316E+00	.97961E-02	.37671E-02	.16058E-01	.39157E+00	.24027E+01	.10036E+00
.99600E+00	.94024E+00	.19358E+00	.28212E+00	.80360E-02	.30319E-02	.13104E-01	.40082E+00	.24025E+01	.99889E-01
.99700E+00	.93922E+00	.19286E+00	.28107E+00	.62745E-02	.22885E-02	.10137E-01	.41004E+00	.24022E+01	.99417E-01
.99800E+00	.93895E+00	.19214E+00	.28001E+00	.45114E-02	.15370E-02	.71543E-02	.41924E+00	.24020E+01	.98945E-01
.99900E+00	.93827E+00	.19142E+00	.27895E+00	.27467E-02	.77755E-03	.41575E-02	.42843E+00	.24018E+01	.98473E-01
.10000E+01	.93894E+00	.19069E+00	.27790E+00	.98044E-03	.10103E-04	.11464E-02	.43759E+00	.24015E+01	.98001E-01
THETA= .15708E+01									
.99000E+00	.10229E+01	.30906E-13	.29282E+00	.17794E-01	.11431E-14	.31078E-01	.41626E+00	.25455E+01	.15798E-13
.99100E+00	.10226E+01	.30794E-13	.29177E+00	.16120E-01	.10347E-14	.28153E-01	.42631E+00	.25457E+01	.15726E-13
.99200E+00	.10223E+01	.30681E-13	.29071E+00	.14444E-01	.92507E-15	.25214E-01	.43634E+00	.25458E+01	.15653E-13
.99300E+00	.10219E+01	.30569E-13	.28966E+00	.12768E-01	.81411E-15	.22259E-01	.44635E+00	.25460E+01	.15580E-13
.99400E+00	.10216E+01	.30457E-13	.28860E+00	.11090E-01	.70185E-15	.19290E-01	.45634E+00	.25462E+01	.15508E-13
.99500E+00	.10212E+01	.30344E-13	.28753E+00	.94111E-02	.58831E-15	.16306E-01	.46630E+00	.25463E+01	.15435E-13
.99600E+00	.10209E+01	.30231E-13	.28647E+00	.77310E-02	.47348E-15	.13307E-01	.47625E+00	.25464E+01	.15363E-13
.99700E+00	.10205E+01	.30119E-13	.28540E+00	.60496E-02	.35739E-15	.10293E-01	.48617E+00	.25466E+01	.15290E-13
.99800E+00	.10202E+01	.30006E-13	.28433E+00	.43668E-02	.24004E-15	.72646E-02	.49608E+00	.25467E+01	.15217E-13
.99900E+00	.10198E+01	.29893E-13	.28326E+00	.26825E-02	.12143E-15	.42216E-02	.50596E+00	.25469E+01	.15145E-13
.10000E+01	.10195E+01	.29780E-13	.28218E+00	.99668E-03	.15778E-17	.11464E-02	.51583E+00	.25470E+01	.15072E-13
THETA= .17453E+01									
.99000E+00	.94213E+00	.19790E+00	.28837E+00	.18577E-01	.73194E-02	.30605E-01	.34507E+00	.24038E+01	.10272E+00
.99100E+00	.94182E+00	.19718E+00	.28733E+00	.16824E-01	.66256E-02	.27725E-01	.35474E+00	.24036E+01	.10225E+00
.99200E+00	.94150E+00	.19646E+00	.28630E+00	.15069E-01	.59235E-02	.24830E-01	.36373E+00	.24034E+01	.10178E+00
.99300E+00	.94119E+00	.19574E+00	.28525E+00	.13312E-01	.52130E-02	.21921E-01	.37303E+00	.24032E+01	.10131E+00
.99400E+00	.94087E+00	.19502E+00	.28421E+00	.11555E-01	.44941E-02	.18997E-01	.38231E+00	.24029E+01	.10083E+00
.99500E+00	.94056E+00	.19430E+00	.28316E+00	.97961E-02	.37671E-02	.16058E-01	.39157E+00	.24027E+01	.10036E+00
.99600E+00	.94024E+00	.19358E+00	.28212E+00	.80360E-02	.30319E-02	.13104E-01	.40082E+00	.24025E+01	.99889E-01
.99700E+00	.93922E+00	.19286E+00	.28107E+00	.62745E-02	.22885E-02	.10137E-01	.41004E+00	.24022E+01	.99417E-01
.99800E+00	.93895E+00	.19214E+00	.28001E+00	.45114E-02	.15370E-02	.71543E-02	.41924E+00	.24020E+01	.98945E-01
.99900E+00	.93827E+00	.19142E+00	.27895E+00	.27467E-02	.77755E-03	.41575E-02	.42843E+00	.24018E+01	.98473E-01
.10000E+01	.93894E+00	.19069E+00	.27790E+00	.98044E-03	.10103E-04	.11464E-02	.43759E+00	.24015E+01	.98001E-01
THETA= .19199E+01									
.99000E+00	.70946E+00	.37193E+00	.27516E+00	.20833E-01	.13756E-01	.29203E-01	.14007E+00	.19958E+01	.20232E+00
.99100E+00	.70922E+00	.37058E+00	.27417E+00	.18851E-01	.12452E-01	.26455E-01	.14737E+00	.19945E+01	.20139E+00
.99200E+00	.70898E+00	.36923E+00	.27318E+00	.16867E-01	.11133E-01	.23693E-01	.15465E+00	.19932E+01	.20046E+00
.99300E+00	.70874E+00	.36787E+00	.27219E+00	.14881E-01	.97972E-02	.20917E-01	.16192E+00	.19919E+01	.19953E+00
.99400E+00	.70850E+00	.36652E+00	.27119E+00	.12894E-01	.84462E-02	.18126E-01	.16917E+00	.19906E+01	.19860E+00
.99500E+00	.70825E+00	.36517E+00	.27019E+00	.10905E-01	.70798E-02	.15322E-01	.17640E+00	.19892E+01	.19767E+00
.99600E+00	.70801E+00	.36381E+00	.26919E+00	.89144E-02	.56980E-02	.12504E-01	.18362E+00	.19879E+01	.19674E+00
.99700E+00	.70776E+00	.36246E+00	.26819E+00	.69220E-02	.43009E-02	.96722E-02	.19082E+00	.19866E+01	.19581E+00
.99800E+00	.70751E+00	.36110E+00	.26718E+00	.49278E-02	.28887E-02	.68265E-02	.19801E+00	.19853E+01	.19488E+00
.99900E+00	.70726E+00	.35974E+00	.26618E+00	.29317E-02	.14613E-02	.39670E-02	.20517E+00	.19839E+01	.19395E+00
.10000E+01	.70701E+00	.35838E+00	.26517E+00	.93369E-03	.18988E-04	.10938E-02	.21233E+00	.19826E+01	.19302E+00

FEE= .10472E+01  
THETA= 0.

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.16568E+01	0.	0.	.43773E-01	0.	0.	-.17488E+01	-.23495E+01	.52020E+00
.99100E+00	-.16563E+01	0.	0.	.39466E-01	0.	0.	-.17632E+01	-.23611E+01	.51781E+00
.99200E+00	-.16558E+01	0.	0.	.35154E-01	0.	0.	-.17775E+01	-.23727E+01	.51542E+00
.99300E+00	-.16553E+01	0.	0.	.30836E-01	0.	0.	-.17918E+01	-.23842E+01	.51303E+00
.99400E+00	-.16548E+01	0.	0.	.26512E-01	0.	0.	-.18061E+01	-.23958E+01	.51064E+00
.99500E+00	-.16543E+01	0.	0.	.22182E-01	0.	0.	-.18204E+01	-.24073E+01	.50825E+00
.99600E+00	-.16538E+01	0.	0.	.17848E-01	0.	0.	-.18347E+01	-.24188E+01	.50586E+00
.99700E+00	-.16533E+01	0.	0.	.13508E-01	0.	0.	-.18490E+01	-.24303E+01	.50347E+00
.99800E+00	-.16528E+01	0.	0.	.91627E-02	0.	0.	-.18632E+01	-.24418E+01	.50107E+00
.99900E+00	-.16523E+01	0.	0.	.48129E-02	0.	0.	-.18774E+01	-.24533E+01	.49868E+00
.10000E+01	-.16518E+01	0.	0.	.45823E-03	0.	0.	-.18916E+01	-.24647E+01	.49629E+00
THETA=	.17453E+00								

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.15692E+01	.21449E+00	.44714E-01	.44870E-01	.90806E-02	.47457E-02	-.16707E+01	-.21949E+01	.51230E+00
.99100E+00	-.15687E+01	.21372E+00	.44554E-01	.40459E-01	.82211E-02	.42991E-02	-.16843E+01	-.22062E+01	.50994E+00
.99200E+00	-.15682E+01	.21294E+00	.44393E-01	.36042E-01	.73523E-02	.38502E-02	-.16980E+01	-.22175E+01	.50759E+00
.99300E+00	-.15678E+01	.21216E+00	.44231E-01	.31620E-01	.64744E-02	.33990E-02	-.17116E+01	-.22287E+01	.50523E+00
.99400E+00	-.15673E+01	.21138E+00	.44070E-01	.27191E-01	.55873E-02	.29456E-02	-.17253E+01	-.22399E+01	.50288E+00
.99500E+00	-.15668E+01	.21060E+00	.43907E-01	.22758E-01	.46911E-02	.24899E-02	-.17389E+01	-.22511E+01	.50052E+00
.99600E+00	-.15664E+01	.20981E+00	.43745E-01	.18319E-01	.37859E-02	.20320E-02	-.17525E+01	-.22623E+01	.49817E+00
.99700E+00	-.15659E+01	.20903E+00	.43582E-01	.13875E-01	.28718E-02	.15718E-02	-.17660E+01	-.22734E+01	.49582E+00
.99800E+00	-.15654E+01	.20825E+00	.43418E-01	.94252E-02	.19487E-02	.11093E-02	-.17796E+01	-.22846E+01	.49346E+00
.99900E+00	-.15650E+01	.20747E+00	.43255E-01	.49711E-02	.10168E-02	.64466E-03	-.17931E+01	-.22957E+01	.49111E+00
.10000E+01	-.15645E+01	.20668E+00	.43090E-01	.51214E-03	.76070E-04	.17775E-03	-.18067E+01	-.23069E+01	.48876E+00
THETA=	.34907E+00								

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.13169E+01	.40312E+00	.88070E-01	.48030E-01	.17066E-01	.93471E-02	-.14457E+01	-.17499E+01	.48883E+00
.99100E+00	-.13165E+01	.40165E+00	.87754E-01	.43318E-01	.15451E-01	.84675E-02	-.14574E+01	-.17602E+01	.48658E+00
.99200E+00	-.13161E+01	.40019E+00	.87437E-01	.38601E-01	.13818E-01	.75834E-02	-.14690E+01	-.17705E+01	.48434E+00
.99300E+00	-.13157E+01	.39872E+00	.87119E-01	.33878E-01	.12168E-01	.66948E-02	-.14807E+01	-.17808E+01	.48209E+00
.99400E+00	-.13153E+01	.39726E+00	.86800E-01	.29149E-01	.10501E-01	.58017E-02	-.14924E+01	-.17911E+01	.47984E+00
.99500E+00	-.13149E+01	.39579E+00	.86481E-01	.24415E-01	.88165E-02	.49042E-02	-.15040E+01	-.18013E+01	.47760E+00
.99600E+00	-.13145E+01	.39432E+00	.86160E-01	.19675E-01	.71153E-02	.40022E-02	-.15156E+01	-.18116E+01	.47535E+00
.99700E+00	-.13142E+01	.39285E+00	.85839E-01	.14931E-01	.53972E-02	.30958E-02	-.15273E+01	-.18218E+01	.47310E+00
.99800E+00	-.13138E+01	.39138E+00	.85517E-01	.10181E-01	.36624E-02	.21850E-02	-.15389E+01	-.18320E+01	.47086E+00
.99900E+00	-.13134E+01	.38991E+00	.85195E-01	.54267E-02	.19109E-02	.12697E-02	-.15505E+01	-.18422E+01	.46861E+00
.10000E+01	-.13130E+01	.38844E+00	.84871E-01	.66736E-03	.14296E-03	.35011E-03	-.15620E+01	-.18524E+01	.46636E+00
THETA=	.52360E+00								

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.93037E+00	.54312E+00	.12875E+00	.52872E-01	.22993E-01	.13665E-01	-.11009E+01	-.10681E+01	.45051E+00
.99100E+00	-.93010E+00	.54115E+00	.12829E+00	.47699E-01	.20817E-01	.12379E-01	-.11096E+01	-.10770E+01	.44844E+00
.99200E+00	-.92983E+00	.53917E+00	.12782E+00	.42521E-01	.18617E-01	.11086E-01	-.11183E+01	-.10858E+01	.44637E+00
.99300E+00	-.92955E+00	.53720E+00	.12736E+00	.37337E-01	.16394E-01	.97871E-02	-.11269E+01	-.10946E+01	.44430E+00
.99400E+00	-.92928E+00	.53522E+00	.12689E+00	.32148E-01	.14148E-01	.84816E-02	-.11355E+01	-.11034E+01	.44222E+00
.99500E+00	-.92901E+00	.53325E+00	.12643E+00	.26953E-01	.11878E-01	.71694E-02	-.11442E+01	-.11122E+01	.44015E+00
.99600E+00	-.92874E+00	.53127E+00	.12596E+00	.21754E-01	.95864E-02	.58508E-02	-.11528E+01	-.11210E+01	.43808E+00
.99700E+00	-.92847E+00	.52929E+00	.12549E+00	.16549E-01	.72716E-02	.45257E-02	-.11614E+01	-.11298E+01	.43601E+00
.99800E+00	-.92820E+00	.52731E+00	.12502E+00	.11339E-01	.49343E-02	.31942E-02	-.11700E+01	-.11385E+01	.43394E+00
.99900E+00	-.92793E+00	.52533E+00	.12455E+00	.61247E-02	.25746E-02	.18562E-02	-.11787E+01	-.11473E+01	.43187E+00
.10000E+01	-.92766E+00	.52334E+00	.12407E+00	.90516E-03	.19262E-03	.51182E-03	-.11873E+01	-.11560E+01	.42980E+00
THETA=	.69813E+00								

R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.45623E+00	.61761E+00	.16552E+00	.58811E-01	.26146E-01	.17567E-01	-.67808E+00	-.23181E+00	.39850E+00



THETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99100E+00	-.45610E+00	.61537E+00	.16492E+00	.53073E-01	.23672E-01	.15914E-01	-.58301E+00	-.23884E+00	.39667E+00	
.99200E+00	-.45598E+00	.61313E+00	.16433E+00	.47329E-01	.21170E-01	.14252E-01	-.68795E+00	-.24586E+00	.39483E+00	
.99300E+00	-.45585E+00	.61088E+00	.16373E+00	.41808E-01	.18642E-01	.12582E-01	-.69289E+00	-.25288E+00	.39300E+00	
.99400E+00	-.45573E+00	.60864E+00	.16313E+00	.35827E-01	.16088E-01	.10904E-01	-.69784E+00	-.25989E+00	.39117E+00	
.99500E+00	-.45560E+00	.60639E+00	.16253E+00	.30068E-01	.13508E-01	.92169E-02	-.70278E+00	-.26690E+00	.38934E+00	
.99600E+00	-.45548E+00	.60414E+00	.16193E+00	.24303E-01	.10901E-01	.75217E-02	-.70772E+00	-.27390E+00	.38751E+00	
.99700E+00	-.45536E+00	.60189E+00	.16133E+00	.18534E-01	.82690E-02	.58182E-02	-.71267E+00	-.28090E+00	.38568E+00	
.99800E+00	-.45524E+00	.59963E+00	.16072E+00	.12760E-01	.56111E-02	.41064E-02	-.71762E+00	-.28789E+00	.38385E+00	
.99900E+00	-.45512E+00	.59738E+00	.16011E+00	.6309E-02	.29277E-02	.23863E-02	-.72257E+00	-.29488E+00	.38201E+00	
.10000E+01	-.45500E+00	.59512E+00	.15951E+00	.11969E-02	.21903E-03	.65798E-03	-.72752E+00	-.30186E+00	.38018E+00	
THETA=	.87266E+00									
THETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.48334E-01	.61761E+00	.19726E+00	.65131E-01	.26146E-01	.20935E-01	-.22807E+00	.65820E+00	.33438E+00	
.99100E+00	-.48308E-01	.61537E+00	.19655E+00	.58791E-01	.23672E-01	.18965E-01	-.22905E+00	.65309E+00	.33284E+00	
.99200E+00	-.48281E-01	.61313E+00	.19584E+00	.52446E-01	.21170E-01	.16985E-01	-.23004E+00	.64798E+00	.33131E+00	
.99300E+00	-.48252E-01	.61088E+00	.19513E+00	.46096E-01	.18642E-01	.14995E-01	-.23103E+00	.64288E+00	.32977E+00	
.99400E+00	-.48222E-01	.60864E+00	.19441E+00	.39741E-01	.16088E-01	.12994E-01	-.23204E+00	.63777E+00	.32823E+00	
.99500E+00	-.48189E-01	.60639E+00	.19370E+00	.33382E-01	.13508E-01	.10984E-01	-.23306E+00	.63266E+00	.32669E+00	
.99600E+00	-.48155E-01	.60414E+00	.19298E+00	.27017E-01	.10901E-01	.89640E-02	-.23408E+00	.62756E+00	.32516E+00	
.99700E+00	-.48119E-01	.60189E+00	.19226E+00	.20647E-01	.82690E-02	.69338E-02	-.23511E+00	.62245E+00	.32362E+00	
.99800E+00	-.48082E-01	.59963E+00	.19154E+00	.14272E-01	.56111E-02	.48938E-02	-.23616E+00	.61735E+00	.32208E+00	
.99900E+00	-.48042E-01	.59738E+00	.19082E+00	.78921E-02	.29277E-02	.28439E-02	-.23721E+00	.61224E+00	.32055E+00	
.10000E+01	-.48001E-01	.59512E+00	.19009E+00	.15073E-02	.21903E-03	.78416E-03	-.23827E+00	.60713E+00	.31901E+00	
THETA=	.10472E+01									

THETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	-.52247E+00	.54312E+00	.22300E+00	.71070E-01	.22933E-01	.23668E-01	-.19480E+00	.19450E+01	.26010E+00	
.99100E+00	-.52230E+00	.54115E+00	.22220E+00	.64164E-01	.20817E-01	.21441E-01	-.19754E+00	.14912E+01	.25891E+00	
.99200E+00	-.52212E+00	.53917E+00	.22140E+00	.57255E-01	.18617E-01	.19202E-01	-.20026E+00	.14879E+01	.25651E+00	
.99300E+00	-.52196E+00	.53720E+00	.22059E+00	.50340E-01	.16394E-01	.16952E-01	-.20297E+00	.14846E+01	.25532E+00	
.99400E+00	-.52178E+00	.53522E+00	.21979E+00	.43420E-01	.14148E-01	.14690E-01	-.20567E+00	.14813E+01	.25412E+00	
.99500E+00	-.52160E+00	.53325E+00	.21898E+00	.36496E-01	.11878E-01	.12418E-01	-.20834E+00	.14780E+01	.25293E+00	
.99600E+00	-.52142E+00	.53127E+00	.21817E+00	.29566E-01	.95864E-02	.10134E-01	-.21100E+00	.14747E+01	.25173E+00	
.99700E+00	-.52123E+00	.52929E+00	.21736E+00	.22632E-01	.72716E-02	.78388E-02	-.21364E+00	.14713E+01	.25054E+00	
.99800E+00	-.52105E+00	.52731E+00	.21654E+00	.15693E-01	.49343E-02	.55325E-02	-.21627E+00	.14680E+01	.24934E+00	
.99900E+00	-.52086E+00	.52533E+00	.21572E+00	.87483E-02	.25746E-02	.32151E-02	-.21888E+00	.14647E+01	.24815E+00	
.10000E+01	-.52066E+00	.52334E+00	.21490E+00	.17990E-02	.19262E-03	.88650E-03	-.22147E+00	.14613E+01	.24691E+00	
THETA=	.12217E+01									

THETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	.90899E+00	.40312E+00	.24197E+00	.75911E-01	.17066E-01	.25681E-01	.53952E+00	.21763E+01	.17792E+00	
.99100E+00	.90870E+00	.40165E+00	.24110E+00	.68545E-01	.15451E-01	.23264E-01	.54530E+00	.21745E+01	.17710E+00	
.99200E+00	.90841E+00	.40019E+00	.24023E+00	.61174E-01	.13818E-01	.20835E-01	.55105E+00	.21727E+01	.17628E+00	
.99300E+00	.90812E+00	.39872E+00	.23936E+00	.53799E-01	.12168E-01	.18394E-01	.55678E+00	.21708E+01	.17547E+00	
.99400E+00	.90783E+00	.39726E+00	.23848E+00	.46419E-01	.10501E-01	.15940E-01	.56249E+00	.21689E+01	.17465E+00	
.99500E+00	.90753E+00	.39579E+00	.23760E+00	.39034E-01	.88165E-02	.13474E-01	.56817E+00	.21671E+01	.17383E+00	
.99600E+00	.90722E+00	.39432E+00	.23672E+00	.31645E-01	.71153E-02	.10996E-01	.57383E+00	.21652E+01	.17301E+00	
.99700E+00	.90692E+00	.39285E+00	.23584E+00	.24250E-01	.53972E-02	.85056E-02	.57947E+00	.21633E+01	.17220E+00	
.99800E+00	.90661E+00	.39138E+00	.23496E+00	.16851E-01	.36624E-02	.60031E-02	.58509E+00	.21614E+01	.17138E+00	
.99900E+00	.90630E+00	.38991E+00	.23407E+00	.94463E-02	.19109E-02	.34885E-02	.59068E+00	.21595E+01	.17050E+00	
.10000E+01	.90598E+00	.38844E+00	.23318E+00	.20368E-02	.14296E-03	.96191E-03	.59626E+00	.21576E+01	.16974E+00	
THETA=	.13963E+01									

THETA=	R	UBAR	VBAR	WBAR	SIRR	SIRT	SIRF	SITT	SIFF	SITF
.99000E+00	.11613E+01	.21449E+00	.25359E+00	.79071E-01	.90806E-02	.26914E-01	.76452E+00	.26213E+01	.90332E-01	
.99100E+00	.11609E+01	.21372E+00	.25268E+00	.71404E-01	.82211E-02	.24381E-01	.77228E+00	.26205E+01	.89917E-01	
.99200E+00	.11605E+01	.21294E+00	.25176E+00	.63733E-01	.73523E-02	.21836E-01	.78001E+00	.26196E+01	.89502E-01	
.99300E+00	.11602E+01	.21216E+00	.25085E+00	.56057E-01	.64744E-02	.19277E-01	.78771E+00	.26187E+01	.89086E-01	
.99400E+00	.11598E+01	.21138E+00	.24993E+00	.48377E-01	.55873E-02	.16705E-01	.79538E+00	.26178E+01	.88671E-01	

.99500E+00	.11594E+01	.21060E+00	.24901E+00	.40691E-01	.46911E-02	.14121E-01	.80303E+00	.26133E+01	.88256E-01
.99600E+00	.11590E+01	.20981E+00	.24809E+00	.33001E-01	.37859E-02	.11524E-01	.81065E+00	.26159E+01	.87841E-01
.99700E+00	.11587E+01	.20903E+00	.24716E+00	.25307E-01	.28718E-02	.89140E-02	.81825E+00	.26150E+01	.87426E-01
.99800E+00	.11583E+01	.20825E+00	.24624E+00	.17607E-01	.19487E-02	.62913E-02	.82382E+00	.26141E+01	.87011E-01
.99900E+00	.11579E+01	.20747E+00	.24531E+00	.99019E-02	.10168E-02	.36560E-02	.83336E+00	.26131E+01	.86596E-01
.10000E+01	.11575E+01	.20668E+00	.24438E+00	.21920E-02	.76070E-04	.10081E-02	.84088E+00	.26121E+01	.86181E-01
THETA= .15708E+01									
.99000E+00	.12489E+01	.33497E-13	.25750E+00	.80169E-01	.14181E-14	.27329E-01	.84267E+00	.27759E+01	.13893E-13
.99100E+00	.12485E+01	.33376E-13	.25658E+00	.72397E-01	.12839E-14	.24757E-01	.85111E+00	.27753E+01	.13829E-13
.99200E+00	.12481E+01	.33254E-13	.25565E+00	.64621E-01	.11482E-14	.22177E-01	.85952E+00	.27748E+01	.13765E-13
.99300E+00	.12477E+01	.33132E-13	.25474E+00	.56841E-01	.10111E-14	.19577E-01	.86791E+00	.27742E+01	.13701E-13
.99400E+00	.12473E+01	.33011E-13	.25379E+00	.49056E-01	.87257E-15	.16963E-01	.87627E+00	.27737E+01	.13637E-13
.99500E+00	.12469E+01	.32889E-13	.25285E+00	.41267E-01	.73261E-15	.14339E-01	.88460E+00	.27731E+01	.13574E-13
.99600E+00	.12465E+01	.32767E-13	.25192E+00	.33473E-01	.59125E-15	.11702E-01	.89290E+00	.27725E+01	.13510E-13
.99700E+00	.12461E+01	.32645E-13	.25098E+00	.25673E-01	.44849E-15	.90515E-02	.90118E+00	.27719E+01	.13446E-13
.99800E+00	.12457E+01	.32522E-13	.25004E+00	.17869E-01	.30433E-15	.63884E-02	.90942E+00	.27713E+01	.13382E-13
.99900E+00	.12452E+01	.32400E-13	.24909E+00	.10060E-01	.15879E-15	.37124E-02	.91764E+00	.27706E+01	.13318E-13
.10000E+01	.12448E+01	.32278E-13	.24815E+00	.22460E-02	.11880E-16	.10236E-02	.92584E+00	.27700E+01	.13254E-13
THETA= .17453E+01									
.99000E+00	.11613E+01	.21449E+00	.25359E+00	.79071E-01	.90806E-02	.26914E-01	.76422E+00	.26213E+01	.90332E-01
.99100E+00	.11609E+01	.21372E+00	.25268E+00	.71404E-01	.82211E-02	.24381E-01	.77228E+00	.26205E+01	.89917E-01
.99200E+00	.11605E+01	.21294E+00	.25176E+00	.63733E-01	.73523E-02	.21836E-01	.78001E+00	.26196E+01	.89502E-01
.99300E+00	.11602E+01	.21216E+00	.25085E+00	.56057E-01	.64744E-02	.19277E-01	.78771E+00	.26187E+01	.89086E-01
.99400E+00	.11598E+01	.21138E+00	.24993E+00	.48377E-01	.55873E-02	.16705E-01	.79538E+00	.26178E+01	.88671E-01
.99500E+00	.11594E+01	.21060E+00	.24901E+00	.40691E-01	.46911E-02	.14121E-01	.80303E+00	.26169E+01	.88256E-01
.99600E+00	.11590E+01	.20981E+00	.24809E+00	.33001E-01	.37859E-02	.11524E-01	.81065E+00	.26159E+01	.87841E-01
.99700E+00	.11587E+01	.20903E+00	.24716E+00	.25307E-01	.28718E-02	.89140E-02	.81825E+00	.26150E+01	.87426E-01
.99800E+00	.11583E+01	.20825E+00	.24624E+00	.17607E-01	.19487E-02	.62913E-02	.82382E+00	.26141E+01	.87011E-01
.99900E+00	.11579E+01	.20747E+00	.24531E+00	.99019E-02	.10168E-02	.36560E-02	.83336E+00	.26131E+01	.86596E-01
.10000E+01	.11575E+01	.20668E+00	.24438E+00	.21920E-02	.76070E-04	.10081E-02	.84088E+00	.26121E+01	.86181E-01
THETA= .19199E+01									
.99000E+00	.90899E+00	.40312E+00	.24197E+00	.75911E-01	.17066E-01	.25681E-01	.53952E+00	.21763E+01	.17792E+00
.99100E+00	.90870E+00	.40165E+00	.24110E+00	.68545E-01	.15451E-01	.23264E-01	.54530E+00	.21745E+01	.17710E+00
.99200E+00	.90841E+00	.40019E+00	.24023E+00	.61174E-01	.13818E-01	.20335E-01	.55105E+00	.21727E+01	.17628E+00
.99300E+00	.90812E+00	.39872E+00	.23936E+00	.53799E-01	.12168E-01	.18394E-01	.55678E+00	.21708E+01	.17547E+00
.99400E+00	.90783E+00	.39726E+00	.23848E+00	.46419E-01	.10501E-01	.15940E-01	.56249E+00	.21689E+01	.17465E+00
.99500E+00	.90753E+00	.39579E+00	.23760E+00	.39034E-01	.88165E-02	.13474E-01	.56817E+00	.21671E+01	.17383E+00
.99600E+00	.90722E+00	.39432E+00	.23672E+00	.31645E-01	.71153E-02	.10996E-01	.57383E+00	.21652E+01	.17301E+00
.99700E+00	.90692E+00	.39285E+00	.23584E+00	.24250E-01	.53972E-02	.85056E-02	.57947E+00	.21633E+01	.17220E+00
.99800E+00	.90661E+00	.39138E+00	.23496E+00	.16851E-01	.36624E-02	.60031E-02	.58509E+00	.21614E+01	.17138E+00
.99900E+00	.90630E+00	.38991E+00	.23407E+00	.94463E-02	.19109E-02	.34885E-02	.59068E+00	.21595E+01	.17056E+00
.10000E+01	.90598E+00	.38844E+00	.23318E+00	.20368E-02	.14296E-03	.96191E-03	.59626E+00	.21576E+01	.16974E+00